

Islam, Wildlife Conservation & You

Rosmidzatul Azila Mat Yamin
Abu Bakar Yang





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Contents

Foreword from IKIM Chairman	vii
Foreword from WWF-Malaysia Chairman	ix
Foreword from IKIM Director-Genaral	xi
Introduction	xiii
Appreciation	xvii
Chapter 1 : Islamic Environmental Policies <i>Abu Bakar Yang</i>	1
Chapter 2 : Natural Resources From The Islamic Perspective <i>Abu Bakar Yang</i>	23
Chapter 3 : Islam And Environmental Sustainability <i>Abu Bakar Yang</i>	39
Chapter 4 : Tiger Conservation <i>Rosmidzatul Azila Mat Yamin</i>	73
Chapter 5 : Sea Turtle Conservation <i>Rosmidzatul Azila Mat Yamin</i>	95
Chapter 6 : Conclusion	115
Bibliography	119
Glossary	123
Index	125







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INSTITUTE OF ISLAMIC UNDERSTANDING MALAYSIA (IKIM)

The earth and multitude flora & fauna species living within it are part of God's bounties offered to mankind. Therefore, human beings should appreciate its intrinsic value and work towards preserving it for future generation.

Despite abundant Quranic verses revealed to mankind to fulfill its duties in protecting and preserving the environment, the human race at large are still ignorant in this matter and treat the whole ecological system in a careless manner. Mankind, in its race towards achieving ultimate monetary gain, has caused massive destruction to the current ecological system.

This matter should not be treated lightly. Hence, proactive actions by various parties are needed to end the rampant abuse towards our environment and the multitude of flora and fauna living in it.

In relation to this, environmental awareness programmes highlighting current problems and issues related to earth component, e.g. handling the issue of species extinction using Islamic approach, should be extended, especially to primary school students to increase their awareness on this matter. Early exposure to our future generation is deemed crucial in nurturing concern and appreciation towards our environment and its living components.

The publication of book entitled **“Islam, Wildlife Conservation and You”** is in line with the ninth principle outlined under Islam Hadhari: Protection of the Environment. Under this principle,





among the matters highlighted is that the life of human is not limited to the relationship between men, but it should accommodate environmental aspect as well. Human is expected to maintain good relationship with other human beings and fulfil their obligations in preservation of the environment in ensuring harmonious and better quality of future living.

Therefore, this publication highlights Islamic approach in preserving the environment and conserving threatened wildlife species – an effort to be lauded in spreading the information to the general public. It is hoped that this effort does not just end here; it should be done on a continuous basis and its focus should be expanded on other threatened species and current global environmental issues as well.

Through this commendable effort, it is hoped that this book would benefit various parties notably educators and Islamic scholars in conveying awareness on environmental issues and its wildlife components to the general public.

It is my fervent hope that with the involvement and earnest efforts by all parties in managing the environment in an effective and efficient manner, it will lead to its preservation for our future generation.

With best wishes,

Tun Abdullah Hj. Ahmad Badawi

Chairperson

Institute of Islamic Understanding Malaysia (IKIM)





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WORLD WIDE FUND FOR NATURE (WWF-MALAYSIA)

Alhamdulillahrabbi'l'aalamin, all praise to Allah the Exalted, the Lord of the universe, thanks to Him, Institute of Islamic Understanding Malaysia (IKIM) in collaboration with WWF-Malaysia has successfully published this book entitled “**Islam, Wildlife Conservation and You**”.

Islam as a divine religion brings multitude bounties to humankind and the environment. It guides the way of life by encompassing both physical and spiritual aspects in it, hence making Islam known as a complete religion. Islam provides guidance and recommendations; either specific or general, for every life's question, in ensuring every action taken is beneficial to human and the environment as a whole, and in minimising harm and destruction.

Nevertheless, one of the grave challenges to be tackled by mankind nowadays is in ensuring that sustainable effort is made towards conservation of wildlife and preservation of the environment. Lack of understanding and awareness towards this issue leads to environmental crisis, hence threatens the wildlife and leads to its extinction. Subsequently, this leads to collateral negative impact on our quality of life.

This book is published in accordance with heightened awareness towards conservation of the environment and wildlife. This book also serves as a guidance or point of reference for Islamic society, notably Islamic leaders, Islamic scholars, and educators. The book, which encompasses and scrutinises conservation of wildlife from Islamic perspective, is the first of its kind to be published in Malaysia.



On behalf of WWF-Malaysia, I would like to extend my deepest gratitude towards the Institute of Islamic Understanding Malaysia (IKIM) for its collaboration in producing this guide book.

To conclude, I hope this guide book will be able to benefit all parties in increasing understanding and awareness towards the efforts in conserving the wildlife and environment, and ultimately, in encouraging more Muslims to advocate the cause of protecting and preserving God's creations.

Best wishes and regards,

Prof. Emeritus Dato' Dr. Abdul Latiff Mohamad

Chairman

WWF-Malaysia

x





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INSTITUTE OF ISLAMIC UNDERSTANDING MALAYSIA (IKIM)

It's an honour for Institute of Islamic Understanding Malaysia (IKIM) to be able to contribute to the success of this book's publication.

This effort is perceived as a favourable starting point which highlights Islamic approach in increasing society's understanding and awareness on conservation of wildlife and the environment. With the inclusion of Islamic approach in it, it is hoped that the book would heighten public understanding on the facts on earth creation and society's roles in fulfilling the obligations as caliphs with trust from God in preserving the environment within their best capacity.

As outlined in the Quran and Sunnah, every component on earth is created by God with its roles and benefits in ensuring the balance of the ecological system and universal existence. Each component is interrelated and supports each other to maintain the environmental balance.

Therefore, any kind of harm or destruction to any of the components shall lead to destruction to the whole ecological system's function.

Hence, every human being should realise this notion and undertake actions within their best capacity in maintaining and preserving this magnificent and unique environment and God's creations living within it for the betterment of the universe.





On top of that, a better interaction between mankind, environment, and all other living creatures must be cultivated within our lives in ensuring preservation of our ecological system.

It is our hope that the articles compiled in this book will be able to increase awareness and understanding among readers on matters related to our environment and the living creatures within it. It is hoped that with clearer understanding on these matters, our society shall be more attentive towards the environment and its living creatures, and able to appreciate these gifts of God.

Best wishes and regards,

Datuk Nik Mustapha Bin Haji Nik Hassan

Director General

Institute of Islamic Understanding Malaysia (IKIM)



Introduction

The environment and its living creatures are a priceless bounty offered by God to mankind. Human always depends on the environment to survive or fulfil their life's purpose ever since the start of life on this earth. Furthermore, human is able to appreciate God's existence and increase knowledge towards becoming a developed civilisation, through understanding of earth's creation and various species living within it that collectively lead to the balance in the environment.

Nevertheless, fanaticism among human towards development activities has caused them to neglect this bounty of God, hence causing them to witness severe exploitation of the environment. This situation has caused deterioration in environmental standard and drastic decline, notably on wildlife species living within the environment.

Thus, aimed with this awareness, WWF-Malaysia in collaboration with Institute of Islamic Understanding Malaysia (IKIM) has embarked on this initiative of publishing a guide book on conservation of our environment to introduce and increase public awareness and appreciation towards our environment as stipulated in our religion, Islam.

This guide book is the first of its kind published in Malaysia, which compiles and scrutinises related aspects towards conservation of the environment and its living creatures, specifically on threatened species. This book highlights Islamic approach in ensuring that it is easy to understand and be embraced and practised by all levels of society.



It is expected that with the publication of this book, it can be used as a guidance or reference for Muslims especially Islamic leaders, Islamic scholars, and educators to address society in championing environmental issues and to work hand in hand in handling current environmental issues and the crises of threatened wildlife species.

The production of this book is in line with mankind's purpose of creation; they are created as caliphs responsible in managing the environment within their best capacity as stipulated in the Quranic verse as follows:

"He has produced you from the earth and settled you in it."

(Surat Hud, 11:61)

"Islam, Wildlife Conservation and You" is divided into five chapters: Islamic Environmental Policies, Natural Resources from Islamic Perspective, Islam and Environmental Sustainability, Tiger Conservation, and Sea Turtle Conservation. This book starts with deliberation on Islamic fundamentals, which serve as a guidance by recommending safe approaches to be used by mankind in managing and protecting the environment.

Next, the book delves into explanation on natural resources such as earth, water, air, solar system, and other natural resources found on earth. Then, the discussion continued with an in-depth explanation on Islamic concepts. The discussion stipulates the roles to be played by human in preserving and conserving the environment.

The discussion then ends with chapters on conservation of two threatened species: tigers and turtles. The chapters focus on the vital roles played by both species towards the eco-system and the threats faced by them, causing them to be on the verge of extinction. Roles and responsibilities of the community in conserving the species are also highlighted in these chapters.





Besides fulfilling the main objective on the book publication i.e., to serve as a guidance or point of reference for the general community notably Islamic leaders, the book is published to complement other objectives, as follows:

- ❑ To introduce species conservation and its importance to the public via Islamic approaches.
- ❑ To foster and increase understanding and awareness towards species conservation from Islamic perspective.
- ❑ To explain conservation issues and threats faced by the wildlife species in Malaysia.

It is our hope that through this small collaborative effort between WWF-Malaysia and Institute of Islamic Understanding Malaysia, it can provide substantial benefits to Islamic leaders and all levels of society.

With best regards,

Rosmidzatul Azila Mat Yamin

Institute of Islamic Understanding Malaysia (IKIM)





Appreciation

Alhamdulillah, all praises to Allah, due to His Grace, **"Islam, Wildlife Conservation and You"** is finally published. This book, published to be used as a guidance and reference for Islamic scholars and general public especially in Malaysia, that contains comprehensive information on environment and wildlife.

On this momentous occasion, WWF-Malaysia and Institute of Islamic Understanding Malaysia would like to express our special appreciation to the people who have made this publication possible:

- i. Umi A'Zuhrah Abdul Rahman, Community Liaison Officer, Species Conservation Programme, WWF-Malaysia
- ii. Syahaneem Othman, Community Engagement and Education Officer, Species Conservation Programme, WWF-Malaysia
- iii. River Foo Siang Choon, Community Liaison Officer, Peninsular Malaysia Seas Programme, WWF-Malaysia

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- ii. Rahayu Zulkifli, Project Leader, Terengganu Turtle Conservation, WWF-Malaysia
- iii. Nor Shidawati Abdul Rasid, Manager, Formal Education, Eco-Institute Program (IPG Lestari), WWF-Malaysia
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- xii. Zawiah Md. Sari, Institute of Islamic Understanding Malaysia (IKIM)





Last but not least, former Chief Director of Institute of Islamic Understanding Malaysia (IKIM), YM Datuk Dr. Syed Ali Tawfik Al-Attas, who paved the way for collaboration between WWF-Malaysia and IKIM through series of conducted programmes which eventually lead to the publication of this book.

WWF-Malaysia and IKIM would like to extend our thanks to all parties involved for their cooperation and assistance, from the book's inception to its publication. It is our hope that this small effort is accepted and blessed by Allah SWT.







CHAPTER 1

ISLAMIC ENVIRONMENTAL POLICIES

Abu Bakar Yang

The word environment is often associated with ecological discipline, a discipline that studies the relationship between one species and another, the relationship between animals and plants, the relationship between a living thing and its environment, the relationship between one ecosystem and another, as well as a variety of other relationships, including that of the human being; who live within the ecological system. From the Islamic perspective, every relationship has its own meaning and function, especially for human beings in the context of *ubudiyyah* to Allah, the God who created all ecological systems and all kinds of relationships that occur between all of His creations.

These relationships must be based on a sound perspective, which places human beings in a key role in this universe as a caliph who governs and manages the world. The Quran also posed another major theme in the explanations related to the environment, which is about the creation of man. This creation process which had been expressed biologically and also philosophically, was later understood by human beings, leading to the exploration of a variety of other disciplines. The explanations regarding the creation of man and his roles were heavily reviewed by Maurice Beaucaille, a surgeon from France and his writings can be found in his two books - 'The Bible, The Quran and Science' and 'What is the Origin of Man?'.





From the philosophical standpoint, the importance of the creation process of man is explained through the first revelation, which is about knowledge and the creation of man, as Allah said:

"Recite in the name of your Lord who created; Created man from a clinging substance. Recite, and your Lord is the most Generous; Who taught by the pen. Taught man that which he knew not."

(Surat al-Alaq, 96: 1-5)

The purpose of Allah SWT explaining the creation process of man is to explain the uniqueness of human creation compared to other creatures. In accordance with his status as caliph on earth, man is provided with all

abilities, advantages and faculties that are not available to other creatures, all of which serve to enable him to worship and devote himself entirely to Allah as Allah said:

"And I did not create the jinn and mankind except to worship Me."

(Surat az-Zaariyat, 51: 56)

However, in today's scientific developments, including those related to ecological disciplines, the human being has been equated with other animal species. This equality has been seen, for example, in terms of the taxonomy system, classifying human beings as *Homo sapiens*. This similarity has been explained by the theory of evolution by Charles Darwin, who described briefly about the development of species over time, undergoing changes through mutation and so on into a higher and complex species. This confusion of modern science's understanding brought by Charles Darwin was further detailed by Harun Yahya in his book 'The Evolution Deceit'.

Judging from current developments, the influence of Western ecological thinking has successfully penetrated into every country





and convinced many that the Western ecology is the best form of ecological thinking, perceived as being progressive and modern. This influence further accelerated with the development of science and technology, bringing together the world of globalization and instant communication without borders. Muslim countries and Muslims themselves are not spared from the influence of Western ecological thinking as many think that Islam has no concept and philosophy which can be used to find solutions to the environmental crisis faced by the world today.

Islam and Ecology

From the philosophical context, there are five major Western ecological features that are contrary to Islamic policies, namely:

- i. There is no concept involving God, angels, judgment day, heaven, hell, among others.
- ii. Equating humans with other species.
- iii. Solutions to problem solving only takes account of contemporary issues.
- iv. Environmentalism is treated as if it is a new religion in the West.
- v. Free from the influence of faith, celestial religion and divine philosophies.

There are differences between Western ecology and Islamic ecology. Islamic ecology expresses its concern for the environment from the scholarly, conservation, management, philosophy and legal aspects. This has been studied, reviewed and debated for a long time by the scholars of Islam, and not the least also by contemporary Muslim scholars, such as Prof. Syed Hossein Nasr who has put forward many Islamic concepts on environment. Other Islamic thinkers who also made big contributions to the environment are Ziauddin Sardar, Agwan AR, Ali Kettani,

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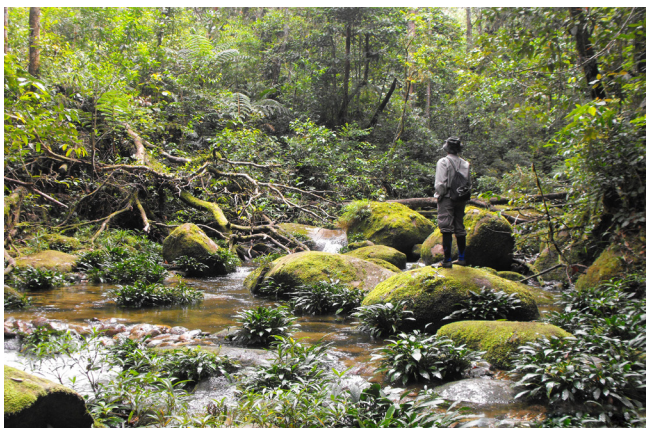
**The opportunity given by Allah to His servants to interact with the environment and His creations and take benefit from these blessings
Allah's test to determine who among His servants are grateful**





Gulzar Heidar, Laleh Bakhtiar, Mehdi Golshani, and local thinkers such as Osman Bakar and Syed Muhammad Naquib al-Attas.

Islamic ecology is interlinked with aspects of faith, jurisprudence (*fiqh*) and also sufism (*tasawuf*). According to Zaini Ujang, there are at least 11 Islamic concepts of ecological principles, and they are the concepts of Cosmology or Universe, the Caliph, Trust, Loving (*Rahim*), Justice, Scale (*Mizan*), Balance (*Tawazun*), Facade (*Fasad*), Beauty (*Jamal*), Freshness (*Nasim*) and Holiness. All of these concepts are important to show how Islam puts environmental values as one of the key elements within the aspects of faith, *fiqh* and sufism.



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The study of the Quran and Sunnah have shown that the environment and all the knowledge behind it play a very important role in inspiring humans to know more about the God who created it. Studies on natural phenomena and wonders of His creations will show the Greatness, Power and Wisdom of Allah, and strengthen the faith of a Muslim to his Lord.

Mehdi Golshani in his Philosophy of Science said, the verses in Quran that speak about the environment can be divided into eight parts.

In the verse that reflects the essential elements of creation and demands humans to unveil its secrets, Allah said:

"So let man observe from what he was created."
(Surat at-Thaariq, 86: 5)

The verse below explains the events that occurred in the universe and commands humans to study those events, as Allah said:





"Have those who disbelieved not considered that the heavens and the earth were a joined entity, and We separated them..."

(Surat al-Anbiyaa', 21: 30)

Allah added:

"Then do they not look at the camels - how they were created? And at the sky - how it was raised? And at the mountains - how they were created? And at the earth - how it was spread out?"

(Surat al-Ghaasiyah, 88: 17-20)

Allah said in the verse demanding humans to study how the world was created:

"Say, [O Muhammad], "Travel through the land and observe how He began creation. Then Allah will produce the final creation. Indeed Allah, over all things, is competent."

(Surat al-Ankabut, 29: 20)

And Allah said in the verses demanding humans to learn and understand natural phenomena:

"Indeed, in the creation of the heavens and earth, and the alternation of the night and the day, and the [great] ships which sail through the sea with that which benefits people, and what Allah has sent down from the heavens of rain, giving life thereby to the earth after its lifelessness and dispersing therein every [kind of] moving creature, and [His] directing of the winds and the clouds controlled between the heaven and the earth are signs for a people who use reason."

(Surat al-Baqarah, 2: 164)

The verse that shows Allah affirms on a variety of natural objects, as His saying:

"By the sun and its brightness. And [by] the moon when it follows it. And [by] the day when it displays it. And [by] the night when it covers it. And [by] the sky and He who constructed it. And [by] the earth and He who spread it."

(Surat ash-Shams, 91: 1-6)

The verses that explain about the creation of the universe and its relation to the Day of





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Resurrection, as His saying:

"He brings the living out of the dead and brings the dead out of the living and brings to life the earth after its lifelessness. And thus will you be brought out."

(Surat ar-Rum, 30: 19)

The verse which insists on the continuity, balance and coordinated nature of Allah's creation, as His saying:

"[And] who created seven heavens in layers. You do not see in the creation of the Most Merciful any inconsistency. So return [your] vision [to the sky]; do you see any breaks? Then return [your] vision twice again. [Your] vision will

return to you humbled while it is fatigued."

(Surat al-Mulk, 67: 3-4)

In the verses that explain the harmony between humans and the environment, as well as the submission of everything on earth to humans, Allah said:

"It is He who created for you all of that which is on the earth."

(Surat al-Baqarah, 2: 29)

And there is Allah's saying in Surat al-Jaathiyah verse 13, which also explains the harmony between human life and the environment.

So that was how Allah explained to His servants about natural phenomena through the verses of the Quran so that humans could see, think and study nature and all of its wonders. It is hoped that humans will acquire a better understanding of this God – given asset and how we can interact with it in a correct manner so that the natural wonders bestowed by Allah to us can be managed and administered properly. Thus, in order to find out the





answers to the eight questions or challenges posed in the Quran earlier, it is necessary for humans to delve into the understanding of nature by studying it well.

Environmental Policies

In order to learn more about Islamic principles that are related to nature, what is needed is the discussion of a few Islamic normative policies which either directly or indirectly form the basis of environmental management. This also answers questions for those who are still confused or have not understood the concept of knowledge and Islamic civilization towards the environment. This is due to the fact that many Muslims themselves either do not feel confident with Islamic policies, or are being influenced by Western concepts and approaches that in fact bring about more disasters and environmental problems.

Briefly explained in this book is how Islamic normative principles could be used as guidelines for humans to interact with the environment. In addition, these normative principles also provide basic knowledge to a Muslim,

making him aware and concerned about issues related to the environment, thus guiding the Muslim on his interaction accordingly, in a manner that is safe and sustainable to the environment.

The fact remains that all matters pertaining to the management and conservation of the environment and its sustainable use are closely linked to the fundamentals of the Islamic field of knowledge, and it is therefore highly desirable that these be nurtured back into the Muslim community, particularly through education. That Islamic field of knowledge entails managing and conserving the environment as well as its relevance with:

- i. Knowledge of *Usuluddin*
- ii. Knowledge of Ethics
- iii. Knowledge of Jurisprudence (*Fiqh*)
- iv. Knowledge of *Usul Fiqh* (*Maqasid Shariah*)
- v. Knowledge of al-Quran and Sunnah

Relevance to the Knowledge of *Usuluddin*

The knowledge of *Usuluddin* (*Tawhid*) has a close relationship with matters related to the conservation of the environment and





everything else within, whether living or dead, posses the ability to think and reason, or otherwise. All of these elements are a clear indication of the existence of Allah the Creator, and all beings which had been created to abide, bow down to Him and exalt Him with praises.

Indeed, Allah has created everything in heaven and on earth to obey His commands and obey all of His laws and conditions, as Allah said in the Quran:

"Have they not considered what things Allah has created? Their shadows incline to the right and to the left, prostrating to Allah, while they are humble. And to Allah prostrates whatever is in the heavens and whatever is on the earth of creatures, and the

angels [as well], and they are not arrogant."

(Surat an-Nahl, 16: 48-49)

Allah added:

"The seven heavens and the earth and whatever is in them exalt Him. And there is not a thing except that it exalts [Allah] by His praise, but you do not understand their [way of] exalting. Indeed, He is ever Forbearing and Forgiving."

(Surat al-Israa', 17: 44)

In the further stages of the creation process, Allah distinguishes humans from all other natural elements by giving them common sense and spiritual capacities, so that they could use these gifts to perform their duties as representatives of Allah (caliph) on earth and thus carry the burden of trust to be accomplished, as Allah said:

"Indeed, we offered the Trust to the heavens and the earth and the mountains, and they declined to bear it and feared it; but man [undertook to] bear it. Indeed, he

Environment and ethics (morals) are interlinked in that it teaches humans to be responsible and to deeply care about the environment, understand the relationship of a Muslim and the environment, and appreciate the bounty of nature as Allah's gift.





was unjust and ignorant."
(Surat al-Ahzab, 33: 72)

In another verse Allah said:

"And [mention, O Muhammad], when your Lord said to the angels, "Indeed, I will make upon the earth a successive authority." They said, "Will You place upon it one who causes corruption therein and sheds blood, while we declare Your praise and sanctify You?" Allah said, "Indeed, I know that which you do not know."
(Surat al-Baqarah, 2: 30)

The Role of Humans in the Environment

Humans play a very important role in preserving and conserving the environment. Once all the elements within the environment are subjugated to humans, the next level requires man to interact with his environment according to what has been outlined by Allah. Every Muslim has a most honourable obligation which can be divided into three main purposes, namely:

- i. To devote himself to Allah as stated in surat az-Zaariyat verse 56.

This act of worship includes everything that Allah has commanded him to, be it a good word or deed. So in this context, the form of worship covers all aspects of life.



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- ii. As a representative (Caliph) of Allah on earth, as stated in Surat al-Baqarah, verse 30.

Humans are demanded to uphold truth and justice, as well as to spread kindness and charity so that the responsibility as a Caliph can be fully accomplished, as Allah said to Prophet Daud a.s.:

"[We said], "O Daud, indeed We have made you a successor upon the earth, so judge between the people in truth and do not follow [your own] desire, as it will lead you astray from the way of Allah ." Indeed, those who go astray from the way of Allah will have a severe punishment for having forgotten the Day of Account."

(Surat Saad, 38: 26)

- iii. To develop a civilization on earth. This was stated by Allah in the Quran:

"And to Thamud [We sent] their brother Salih. He said, "O my people, worship Allah; you have no deity other than Him. He has

produced you from the earth and settled you in it, so ask forgiveness of Him and then repent to Him. Indeed, my Lord is near and responsive."

(Surat Hud, 11: 61)

The meaning that could be understood here is that, humans are able to develop the earth through various efforts such as agriculture, industry, and to improve the quality of life and prevent from doing things that can damage the earth. Prospering the earth and preventing it from destruction are the responsibilities of humans as caliphs.

If this obligation is well carried out in accordance with all of His conditions, then Allah has promised benefits and blessings to mankind (refer to Surat al-A'raaf, 7: 96).

Relevance to the Knowledge of Ethics (Morals)

Ethical knowledge or morals (sufism) is a field of knowledge that is closely related to environmental conservation and is considered as one of the pillars of Sufism. The Sufis





have defined, 'honesty with truth, and ethics (morals) with invention', it is therefore obvious that environment is part of the disclosed invention.

Those among the Sufis have said that, "All dimensions within Sufism relate to ethics (moral), therefore whoever improved his ethics (morals), also improves his level of Sufism. This is also emphasized by Ibn al-Qayyim and Al-Kattani.

In a hadith, Prophet (pbuh) also mentioned that, *"I was sent (by Allah) to only perfect the sublime noble morals."* (Hadith narrated by al-Bukhari).

Allah also said in the Quran:

"Indeed, Allah is with those who fear Him and those who are doers of good."
(Surat an-Nahl, 16: 128)

Based on the last verse, religion requires its followers to believe and fear Allah (*taqwa*) and do well to other fellow

beings. Committing to Righteousness and doing good deeds are the main platforms for someone to continue on the path/religion of Allah. This obligation should be implemented at all times and under any circumstances, and onto every creature in this universe. Therefore, taking care of the environment is part of the obligation of being an Allah-fearing person and His blessed servant.

Consequently, there are many commandments of Allah telling humans to be concerned with and to take care of the environment along with all other beings within it, including fellow human beings, animals, plants, water, air, soil, and so on.



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Responsibility and Love for the Environment

This is an Islamic principle which is propagated to regulate human relationships with nature and everything within it, because each creature has been created by Allah to fulfil its own roles.

Each and every one of these creatures in whatever condition it maybe, even if it does not seem alive, is actually in a state of worshipping/bowing down and submitting to Allah as His saying:

"Do you not see that to Allah prostrates whoever is in the heavens and whoever is on the earth and the sun, the moon, the stars, the

mountains, the trees, the moving creatures and many of the people? But upon many the punishment has been justified. And he whom Allah humiliates - for him there is no bestowed of honour. Indeed, Allah does what He wills."

(Surat al-Hajj, 22: 18)

It is no wonder that the efforts to conserve the environment lead to a feeling of spiritual fulfillment to those who submit to Allah, because nature is also in a state of submission and prostration to Allah.

A Muslim's Relationship with the Environment

For a Muslim, nature is a sign of the Greatness of Allah who created all things in His dominion. As Allah said:

"Indeed, in the creation of the heavens and the earth and the alternation of the night and the day are signs for those of understanding."

(Surat Ali Imran, 3: 190)

Allah further said:



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"Exalt the name of your Lord, the Most High, Who created and proportioned, And Who destined and [then] guided."

(Surat al-A'la, 87: 1-3)

This verse clearly shows the strong proof of Allah's Greatness and Dominion. Therefore, the relationship of a Muslim with his environment is a very important relationship, especially in the form of lessons obtained through reflection and thought.

Nature is Allah's Gift of Grace

A Muslim should regard nature as Allah's gift of grace to him, as Allah said:

"Do you not see that Allah has made subject to you whatever is in the heavens and whatever is in the earth and amply bestowed upon you His favours, [both] apparent and unapparent? But of the people is he who disputes about Allah without knowledge or guidance or an enlightening Book [from Him]."

(Surat Luqman, 31: 20)

This contrasts with the Western view that perceives environmental degradation and destruction as being attributed to an increase in world population and demand for natural resources. The Quran states that Allah's grace cannot be quantified, the earth is fertile and

Human's superficial knowledge of nature would not be able to comprehend the Greatness of Allah, and for this reason, Allah has described some of the natural phenomena that reveals His Greatness through His saying in Surat Faathir verse 28:

"Indeed, those who fear Allah from among His servants are only those who have knowledge..."

And His saying in Surat al-Ankabut verse 49:

"The truth is, the Quran is distinct verses [preserved] within the breasts of those have been given knowledge."



its natural resources abundant. It is man who have been fooled by his own cruelty and ingratitude towards Allah's graces, which has caused natural imbalance within the environment which in the end negatively impacts human life.

There are many verses in the Quran that explain to us about the bounties of nature that Allah has given to men, so that they may see the Greatness of Allah and learn from it, as well as accepting it with gratitude.

Relevance to the Knowledge of Jurisprudence (Fiqh)

Knowledge of jurisprudence (*fiqh*) is a knowledge that regulates human relations with his Lord, with himself, with his family and

community as well as with his environment, and linked to the five rules of Shariah which are, compulsory (*wajib*), voluntary (*sunat*), sinful (*haram*), detestable (*makruh*), and permissible (*harus*).

If we open the book of jurisprudence, the first discussion mentioned is *thaharah* (process of cleansing), and therein also contains the various types of impurities, way of cleansing, and the various types of water found in the environment that can be used for the purpose of *thaharah*. All of this is related to human interaction with the environment.

There are also discussions related to the daily prayers, payment of tithe and its distribution, fasting, performance of *hajj*, charity etc. Also discussed are rules and guidelines that

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ordain one's interaction with other human beings, creatures and the environment.

With the application of various laws and regulations, Islam in the past and at present, has been able to determine the judgement against those who have transgressed against environmental protection. These offences are usually committed by large industries which are not too concerned with the negative impacts that befall the community.

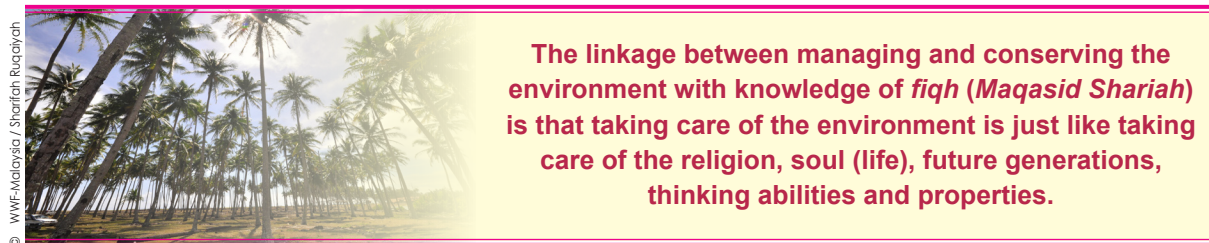
Relevance to the Knowledge of Usul Fiqh (Maqasid Shariah)

Islam requires its followers to understand that environmental conservation is not only discussed within the fields of jurisprudence, but also within *usul fiqh* especially for purposes of Shariah (*maqasid shariah*). The purpose of sharia laws is to protect the religion, followers'

lives, that of their future generation, thinking abilities and property. The Sharia was later named the "*al-dharurah al-khamsa*" which means five betterments (*maslahat*) that form the basis of human life. These were then made as references to ensure that humans conform to five basic requirements, without which, living would be incomplete. When we look deeper we'll find that matters related to environmental preservation and sustainability are contained in these five basic betterments.

Caring for the Environment Just Like Caring for the Religion

As a Muslim we have to understand that the effort to conserve and rehabilitate the environment is equivalent to caring for the religion. This is because the sin of environmental destruction actually taints the essence of our life on earth. Such behaviours deviate from





Allah's command with regard to the relationship between humans being and his natural environment.

The act of environmental degradation or destruction negates the principles of fairness and common conduct and courtesy, despite them being Allah's commandments that must be carried out, as Allah said in the Quran:

"Indeed, Allah orders justice and good conduct, and giving to relatives and forbids immorality and bad conduct and oppression. He admonishes you that perhaps you will be reminded."

(Surat an-Nahl, 16:90)

The act of polluting and damaging the environment also taints the caliphate function assigned to man. This is because the

earth does not belong to man for him to do as he pleases but this earth belongs to Allah, seconded to man who later claimed to carry out commandments of Allah on it. Therefore, people need to remember that they are appointed as the Caliphs of Allah on earth that is owned by Allah. Therefore, humans are not supposed to act like kings who are not accountable for things that they do.

In addition, environmental destruction also means going against Allah's command to cultivate, rehabilitate the earth and forbids any act of damaging it, as Allah had said:

"And cause not corruption upon the earth after its reformation. And invoke Him in fear and aspiration. Indeed, the mercy of Allah is near to the doers of good."

(Surat al-A'raaf, 7:56)

Caring for the Environment is Equivalent to Caring for Life

What is meant by equating caring for the environment with caring for human life is that it means protection of a person's psychology





and his safety. It is clear that the environmental damages, pollution and deterioration of natural resources, as well as an environmental imbalance will endanger human life. Increasingly severe damages will cause more harm to human life.

Islam has given a very big emphasis on human life. This can be seen when Islam adjudges murder as one of the biggest sin anyone can commit. This is has also been given emphasis in the Quran thus:

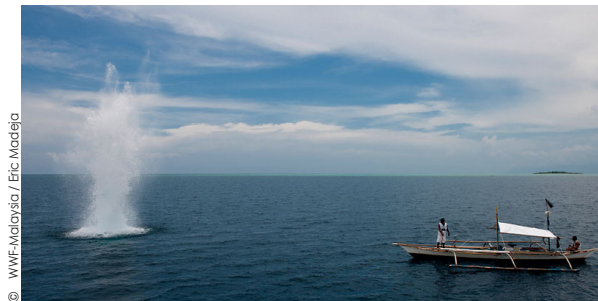
"Because of that, We decreed upon the Children of Israel that whoever kills a soul unless for a soul or for corruption [done] in the land - it is as if he had slain mankind entirely. And whoever saves one - it is as if he had saved mankind entirely. And our messengers

had certainly come to them with clear proofs. Then indeed many of them, [even] after that, throughout the land, were transgressors."
(Surat al- Maidah, 5:32)

Caring for the Environment is akin to Caring for Our Future Generation

Caring for the environment is also included in the category of caring for the future generation. Damage and destruction to the natural environment, such as excessive extraction of natural resources threaten the survival of future generations. Although the exploitation of the Earth's natural resources can lead to modernity and sophistication, the adverse effects will be felt by the future generations. If this happens, it means that we have left behind a trail of damage and destruction to the environment to be inherited by the future generations.

Just as parents and the community are responsible for education, health, and morals of the future generations, they are also responsible for the action that can damage the environment and can cause adverse effects



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to the future generations. It has been stated by the Prophet in a hadith:

"Each of you is a guardian, and each of you will be asked about your guardianship. The leader is a guardian, and the man is a guardian over the people of his house, and the woman is a guardian over her husband's house and children. So each of you is a guardian, and each of you will be asked about your guardianship."

(Hadith narrated by Imam Ahmad, al-Bukhari and Muslim)

Caring for the Environment is Equivalent to Caring for Our Thinking Abilities

Safeguarding the environment is equivalent to caring for our own thinking abilities, or sense of right or wrong, and this is a platform towards the perfection of obligations (*taklif*) in Islam. Whoever has taken leave of their senses and does not have the ability to think or differentiate between right and wrong, will not incur any mandatory burden and all deeds will not be written in the book of practices.

Preserving the environment in the broader sense also means taking care of a human being together with the rest of the physical elements of his makeup, namely the physical self, his soul and his ability to reason. Therefore, all efforts in taking care of human survival will be meaningless if his ability to think and reason is not taken care of. The Quran contains many analogies with repeatedly noted expressions like "Don't you think...", "there are signs for men who understand...", "Don't





you want to take lessons..." and many more expressions that suggest to us to use our thinking processes to think and learn.

Therefore, whoever cares for the environment, also cares for his ability to think and reason between now and the future, between good and bad, between obligation and pleasure, and between truth and strength. Therefore, someone who has taken leave of his own senses and thinking abilities, be allowed to interact with nature because it is not known if he will be able to distinguish clearly, which one of his actions is beneficial and which one of them is not.

Caring for the Environment is Equivalent to Caring for Our Properties

Allah SWT has bestowed upon mankind properties as provision for life on Earth, as Allah has said:

"And do not give the weak-minded your property, which Allah has made a means of sustenance for you, but provide for them with it and clothe them and speak

to them words of appropriate kindness."

(Surat an-Nisa', 4:5)

Property is not just limited to money, gold or gems only, but it also refers to the entire asset owned by mankind, and all the efforts to own them also constitute property. Therefore, this Earth is also considered a property, similarly with trees, crops, cattle, living abode, clothes and everything man needs are also considered as property.

So, protecting the environment is also an obligation to protect the various forms of properties mentioned above. Therefore, do not do anything that is detrimental to the environment by excessive exploitation which will result in its loss.

Relevance to the Knowledge of Quran and Sunnah

All previous discussions, namely Shariah, starts with the knowledge of *usuluddin*, ethics (moral), and *usul fiqh*. The source of all these come from the Quran, which is the main reference because all the laws, methods issued,





and conclusions made will not be accepted if it is not backed by the Quran and Sunnah.

Indeed, the Quran also has a major provision on the environment, either directly or indirectly. The Quran describes to us how Allah perfect the creation of this world as His saying:

"Who perfected everything which He created and began the creation of man from clay."

(Surat as-Sajadah, 32: 7)

In another verse Allah stated:

"[And] who created seven heavens in layers. You do not see in the creation of the Most Merciful any inconsistency. So return [your] vision [to the sky]; do you see any breaks?"

(Surat al-Mulk, 67: 3)

Besides, the Quran's arguments that give attention to the environment is reflected in the names of chapters in the Quran which bear the names of insects, animals, plants and the names of the other celestials.

Clear examples of such chapters are *al-Baqarah* (cow), *al-An'aam* (cattle), *an-Nahl* (bees), *an-Naml* (Ants), *al-Ankabut* (spider), *al-Fil* (elephant) and *al-Aadiyaat* (horse).

These arguments are the ones that made the Polytheists and Jews feel amazed and wondered, "What are the abilities owned by the flies and spiders, until Allah took examples from those animals?"

Allah then answered their inquiries by saying:

"Indeed, Allah is not ashamed to set for any parable (that of) a gnat or anything that smaller than it. And those who have believed know that it is the truth from their





Lord. But as for those who disbelieve, they say, "What did Allah intend by this as an example?" He misleads many thereby and guides many thereby. And He misleads not except the defiantly disobedient,"

(Surat al-Baqarah, 2: 26)

Next, we will find in the Quran, Surat at-Tiin, the name of a plant, al-Hadid, the name of a metal, ar-Raad, one of the phenomena of nature, az-Zaariyat, al-Najm, al-Fajr, as-Shams, al-Lail, ad-Duha, al-Ashr, at-Thuur, al-Balad, which are all names taken from natural phenomena.

The use of those names in the Quran have specific purposes, including to raise awareness and concern among mankind so that we would always give serious attention to the environment, sustaining it and responsibly preventing it from destruction and pollution.

Conclusion

The question of the environment is essentially a moral question. The most effective

solution appears to depend on human morality; by infusing moral values, justice, virtue, love, friendliness, positive attitude and so on. Such noble values may have eroded away from us, leading some to utter what Qarun claimed: *"He said, I was only given it because of knowledge I possess"* (Surat al-Qasas, 28: 78).

It was said by Prophet Sulaiman (Solomon), when he received Queen Balqis's throne.

"Said one who had knowledge from the Scripture, "I will bring it to you before your glance returns to you." And when [Solomon] saw it placed before him, he said, "This is from the favour of my Lord to test me whether I will be grateful or ungrateful. And whoever is grateful - his gratitude is only for [the benefit of] himself. And whoever is ungrateful - then indeed, my Lord is Free of need and Generous."

(Surat an-Naml, 27: 40)

In a crisis that seems to be never ending, Islam with its purity of faith, perfection of shariah and balance of moral claims, provides





the best solution to humanity facing various environmental issues especially through its teachings that consist of rule of laws and moral guidance which in turn is based on faith in Allah Almighty.

The best of humanity is to be able to take benefits from the teachings of Islam in their interaction with the environment as the Islamic guidance is a guidance for all mankind. Allah said in the Quran:

"O People of the Scripture, there has come to you Our Messenger making clear to you much of what you used to conceal of the Scripture and overlooking much. There has come to you from Allah a light and a clear Book. By which



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Allah guides those who pursue His pleasure to the ways of peace and brings them out from dark-nesses into the light, by His permis-sion, and guides them to a straight path."

(Surat al-Maidah, 5: 15-16)

Your Role

- 1. Understand and carry out your responsibilities as a caliph who prospers and governs nature effectively.**
- 2. The interests and the future of the environment should always be a priority and this is in line with Islamic principles that should be disseminated to the entire community.**





CHAPTER 2

NATURAL RESOURCES FROM THE ISLAMIC PERSPECTIVE

Abu Bakar Yang

Nature is a gift from Allah SWT for all mankind to be used to fulfill their responsibility as the caliph (leaders) of this world. On this vast planet, natural resources are provided for us in abundance; lush green forest provide humans with oxygen and timber, rivers sustain all life forms including humans, expansive oceans teeming with fish and other sources of food to nourish us, land under our feet for us to sow the seeds and reap the harvest, plants and fruits for us to eat, metals and minerals deep underground which can be processed and used in a variety of ways, and many other natural resources. Allah SWT has entrusted us with all these gifts, for us to use them wisely and

sensibly.

Islam views the Earth as a resource to sustain the human life, as the background for human beings to conduct their activities and as their home. To ensure this 'home' is safe and peaceful, human beings must learn to manage all these natural resources in the best and wisest way possible.

Therefore, Islam emphasises the importance of nature to ensure humans recognise its importance and safeguard their 'home'. There are 500 verses in the al-Quran to guide us on matters related to nature and how to manage it sustainably. Here are some discussions on some of the selected verses.

Natural Resources from the Islamic Perspective **23**



Soil

Soil is a very important resource for humans. Soil covers the Earth where people build their lives and create glorious civilizations. Humans are made from soil, and will return to it when they die, and will be revived back to life with soil again to face their final judgement based on how they have lived their lives.

"From the earth We created you, and into it We will return you, and from it We will extract you another time."

(Surat Thaaha, 20: 55)

Allah describes again;

"And Allah has caused you to grow from the earth a [progressive]



growth. Then He will return you into it and extract you [another] extraction."

(Surat Nuh, 71:17 & 18)

Allah SWT has reminded us that we are created from soil, so we are entrusted to work on it and use it wisely (refer to Surat Hud, 11: 21).

That verse describes in detail, the secrets behind human creation from the Earth's elements and the relationship between humans and the Earth in order for humans to live in peace on Earth with His other creations. It also signifies that humans have the capacity and ability to manage this Earth, since they are created from the soil and other elements from earth themselves.



For that, Allah has created this Earth so that it will obey and concur to God's demands, and can be used by mankind who in turn has been entrusted with the responsibility to take care of it as commanded by Allah:

"It is He who made the earth tame for you - so walk among its slopes and eat of His provision - and to Him is the resurrection."

(Surat al-Mulk, 67: 20)

If Allah has not made this Earth to obey humans, it will be very difficult for humans to utilize it. Allah has reminded us repeatedly on this matter in some Quranic verses, that He has done this solely for humans to easily utilize and benefit from the Earth.

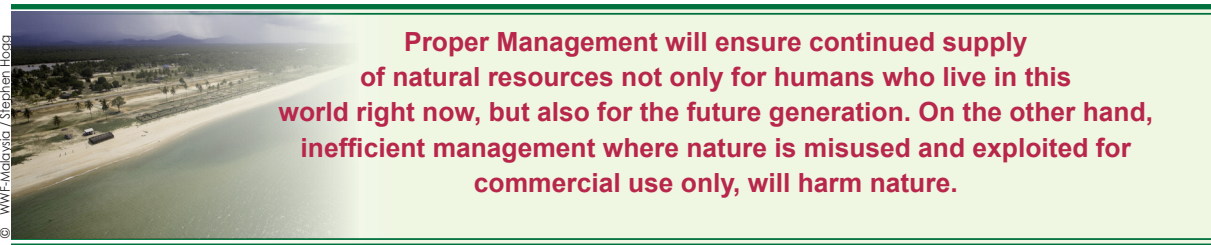
Based on Islamic rules, soil or land can be divided into three main categories of land use:



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- i. Developed land (*amir*);
- ii. Idle land (*mawat*); and
- iii. Protected land (*harim*)

Besides these three main categories, there is another type of land known as *hima* land. *Hima* land is idle land (*mawat* land) that is permanently conserved for a specific purpose such as providing grazing areas for cattle, protecting ecosystems in environmentally sensitive areas, and so on.



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Proper Management will ensure continued supply of natural resources not only for humans who live in this world right now, but also for the future generation. On the other hand, inefficient management where nature is misused and exploited for commercial use only, will harm nature.





Allah has also made the Earth suitable for humans to conduct agricultural activities, as in Allah's command:

"Then let mankind look at his food - How We poured down water in torrents, Then We broke open the earth, splitting [it with sprouts], And caused to grow within it grain And grapes and herbage And olive

and palm trees And gardens of dense shrubbery And fruit and grass - [As] enjoyment for you and your grazing livestock."

(Surah 'Abasa, 80: 24-32)

Allah commanded again:

"And it is He who spread the earth and placed therein firmly set mountains and rivers; and from all of the fruits He made therein two mates; He causes the night to cover the day. Indeed in that are signs for a people who give thought. And within the land are neighbouring plots and gardens of grapevines and crops and palm trees, [growing] several from a root or otherwise, watered with one water; but We make some of them exceed others in [quality of]





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fruit. Indeed in that are signs for a people who reason."

(Surah ar-Raad, 13: 3 & 4)

There are many verses like the one above which describe the Earth as the main supplier of human needs whether they are in the form of food, minerals or in terms of aesthetic value it provides. However, many humans who live on the Earth do not understand nor realize that only a small part of the Earth's surface can be utilized.

The Earth's surface is approximately 329 million hectares, out of which only 226 million hectares is available for human use. The other 103 million hectares cannot be utilized as it is unsuitable for farming, unreachable by humans, or have extreme weathers that make it impossible for humans to live in it. More

alarmingly, we are losing 26 billion tones of usable soil annually because of human indifference and inefficient management.

Water

Water is a very important source of life for humans. Allah SWT has emphasised in al-Quran that water is a very important natural resource and that water is a source of life, because life cannot be sustained without water, as stated by Allah SWT:

"Have those who disbelieved not considered that the heavens and the earth were a joined entity, and We separated them and made

Three quarters of the Earth's surface is covered with water. However, 99 percent of all water on Earth cannot be used directly because: 98 percent of them are in the form of saltwater in the oceans, one percent in the form of ice frozen in the Arctic and Antarctica, leaving us with only one percent of freshwater to be shared among all of the Earth's population.





*from water every living thing?
Then will they not believe?"*

(Surat al-Anbiyaa', 21: 30)

In reality, water is among one of the most precious gifts given to us by Allah SWT. However, since He has made it available in large quantities and easily obtainable, humans tend to overlook its importance and fail



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to appreciate it. This is unfortunate, as water is a gift that we must be grateful for. Without water, it is impossible for us to continue living in this world. This is stated in by Allah SWT in al-Quran:

"It is Allah who created the heavens and the earth and sent down rain from the sky and produced thereby some fruits as provision for you and subjected for you the ships to sail through the sea by His command and subjected for you the rivers."

(Surat Ibrahim, 14: 32)

In another Surat, Allah said:

"And after that He spread the earth. He extracted from it its water and its pasture, And the mountains He set firmly As provision for you and your grazing livestock."

(Surat an-Nazi'aat, 79: 30-33)

Since Allah has given us water in abundance, humans forget how precious this gift is. They will realize the real value of water only when water becomes scarce.





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At this moment, humans do not appreciate the value of water given to us by Allah SWT as it is still available in abundance. It is undeniable that three quarters of the Earth's surface is covered with water. However, 98 percent of all water on Earth is in the form of saltwater, in the ocean, and another one percent is in the form of ice, frozen in the Arctic and Antarctica. Therefore, 99 percent of the water on Earth cannot be used directly. This

means we are left with a mere one percent of freshwater to be shared among all of the Earth's population. Even this one percent of freshwater is in a bad state due to unsustainable consumption by humans and deterioration in river water quality over the years due to pollution from untreated effluents and wastes channeled into the water. Wastage and poor water management are also among the main reasons for deterioration in water quality and quantity.

The careless usage of water and inefficient water management has resulted in many mishaps to human lives. For example, at the end of the last century, approximately 25,000 people have been infected with water-borne diseases daily. This is because two-thirds of the world population still uses untreated water to drink, cook, wash and bathe every day. It is estimated that about 20 million tonnes of polluted water flows from rivers and lakes into the oceans. Most of our sources of freshwater are polluted by garbage, agricultural run-off, industrial effluents, and sewage. These polluted rivers then flow across borders to other countries, hence pollution from one country





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can affect many other countries surrounding it. Therefore, it is not surprising that 40 percent of the world population at the end of the last century were dependent on water from their neighboring countries.

Source of Fresh Water

According to Islamic law, it is stated that the sources of fresh water can be divided into three categories; river, well and spring water.

River

Rivers can be classified further into three classes; big natural rivers, small natural rivers (or branches of big rivers), or canals and water channels shared between regions.

Well

Wells can also be categorized into three categories based on its usage: dug wells for public use, for temporary use, or wells dug by individuals for their own use.

Spring Water

Spring waters can be divided into three categories; natural spring waters, spring waters discovered by an individual on public land, and spring waters discovered by an individual on his own land.

Ocean

Ocean is a universe of its own that surrounds the land masses. Its breadth crosses borders



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and continents, and its harvests are so rich and plentiful for humans that it is invaluable. Even with our vast knowledge, we cannot compile all its benefits, since a lot of them are still unknown to us.

Allah SWT reminded us in this verse about the riches and benefits of ocean for humans:

“Lawful to you is game from the sea and its food as provision for you and the travelers, but forbidden to you is game from the land as long as you are in the state of ihram. And fear Allah to whom you will be gathered.”

(Surat al-Maidah, 5:96)

Through the gift of oceans too, ships can sail ferrying humans and their goods to be traded around the world. The ocean also provides us with fishes and other forms of food. It supplies us with pearls for us to adorn ourselves, crude oil petroleum and natural gas. Salt also comes from oceans, the single most important ingredient in our food. Salt is used in medicines too and has numerous other benefits which is not fully comprehended beyond our present knowledge.



Air

Air is a mixture of gasses and water droplets that fills our atmosphere. Two most dominant elements in air are nitrogen (78.08%) and oxygen (20.95%). Apart from that, there are other gasses that are present in small percentages such as argon (0.934%), carbon dioxide (0.031%) and other gasses in even smaller percentages.

In al-Quran, air is not mentioned directly as 'air', but as 'wind' in order to represent the air that is constantly moving or circulating around us. Air moves around because of difference in temperature or pressure. As it moves, it pushes the clouds around from one





place to another bringing moisture harvested from wet places to dry and arid places in the form of rain, bringing life back to the barren lands. As Allah SWT has described in his verses:

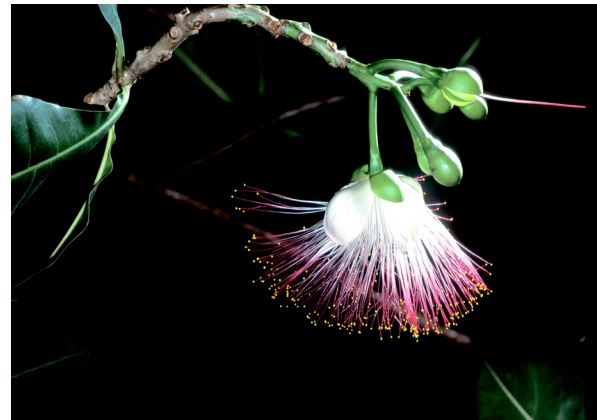
"And it is He who sends the winds as good tidings before His mercy until, when they have carried heavy rainclouds, We drive them to a dead land and We send down rain therein and bring forth thereby [some] of all the fruits. Thus will We bring forth the dead; perhaps you may be reminded."

(Surat al-A'raaf, 7:57)

Thus Allah has described to us how air plays a major role in maintaining human life. Through His compassion, air is not only used for breathing, but also in other important daily activities. By manipulating the physics in air movement, man has succeeded in inventing airplanes as a faster mode of transportation and invented spaceships to explore outer space. Radio waves, wireless signal, telegraph, etc. are transmitted using air as a medium, enhancing communications across borders.

We also benefit from pollination, where pollen is transferred through air for plant reproduction, the end result which supplies humans and animals with food. All these activities; pollens transported by wind to pollinate plants, dark clouds moving to bring rain, lightning and thunder, are all for the benefit of humans, as Allah has mentioned in al-Quran:

"It is Allah who sends the winds, and they stir the clouds and spread them in the sky however He wills, and He makes them fragments so you see the rain emerge from within them. And when He causes it to fall upon whom He wills of His servants, immediately they rejoice. Although they were,





before it was sent down upon them - before that, in despair. So, observe the effects of the mercy of Allah – how He gives life to the earth after its lifelessness. Indeed, that [same one] will give life to the dead, and He is over all things competent. But if We should send a [bad] wind and they saw [their crops] turned yellow, they would remain thereafter disbelievers.”

(Surat ar-Rum, 30:49-51)

“And We have sent the fertilizing winds and sent down water from the sky and given you drink from it. And you are not its retainers.”

(Surat al-Hijr, 15:22)

“And it is He who sends the winds as good tidings before His mercy, and We send down from the sky pure water That We may bring to life thereby a dead land and give it as drink to those We created of numerous livestock and men. And We have certainly distributed it among them that they might be reminded, but most of the people refuse except disbelief.”

(Surat al-Furqan, 25:48-50)

The Universes Around the Earth

Now we will discuss about the solar system; the sun and the moon and the benefit we get from them, as well as the stars and the benefits from them too. Verses that are mentioned in the al-Quran and proven by astronomers, agricultural experts, and other experts in seafaring and deserts navigation, and other



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subjects we do not have the knowledge yet to comprehend. All are made for human convenience in this world by Allah SWT for us. Allah SWT has described in the al-Quran about night and day, and the good they bring to humans:

"Indeed, your Lord is Allah, who created the heavens and earth in six days and then established Himself above the Throne. He covers the night with the day, [another night] chasing it rapidly; and [He created] the sun, the moon, and the stars, subjected by His command. Unquestionably, His is the creation and the command; blessed is Allah, Lord of the worlds."
(Surat al-A'raaf, 7:54)

Allah also said:

"[He is] the cleaver of daybreak and has made the night for rest and the sun and moon for calculation. That is the determination of the Exalted in Might, the Knowing. And it is He who placed for you the stars that you may be guided by them through the darkness of the

land and sea. We have detailed the signs for a people who know."
(Surat al-An'aam, 6:96-97)

"It is He who made the sun a shining light and the moon a derived light and determined for it phases - that you may know the number of years and account [of time]. Allah has not created this except in truth. He details the signs for a people who know"
(Surat Yunus, 5:10)

And Allah said again:

"They ask you, [O Muhammad], about the new moons. Say, "They are measurements of time for the people and for Hajj." And it is not righteousness to enter houses from the back, but righteousness is [in] one who fears Allah. And enter houses from their doors. And fear Allah that you may succeed."
(Surat al-Baqarah, 2: 189)

All of Allah SWT's creations we see in the night sky are subjected to serve humans as His give to us. And to benefit us, Allah SWT reminds





us of the benefits of His gifts and it is up to us to take the initiative to study, and uncover the Sunnah or Allah SWT's orders behind them. Islamic rules do not limit us from uncovering those benefits.

Based on that, we can be sure that the ventures to utilize sources of natural energy are encouraged by *syarak* (Islamic rules). They are included in *fardhu Kifayah* (responsibility of someone in the community), and turned into *fardhu ain* (responsibility of each individuals) when there is a need for them.

Below the Earth's Surface

Humans do not only derive benefits from things on the Earth's surface, but also the many riches underneath it. There are many resources beneath the layers of the Earth's

Water is made up of hydrogen and oxygen. Soil is made up of many different elements combined together whereas the air is made up of two dominant elements nitrogen (78.08%) and oxygen (20.95%), and other gasses in very small percentages.

core such as metals and oil and other substances derived from oil, coal, sulphur, salt, and other resources that may be unknown to humans. All these resources are created and subjected for human use. Allah SWT said:

"We have already sent Our messengers with clear evidences and sent down with them the Scripture and the balance that the people may maintain [their affairs] in justice. And We sent down iron, wherein is great military might and benefits for the people, and so that Allah may make evident those who support Him and His messengers unseen. Indeed, Allah is Powerful and Exalted in Might."

(Surat al-Hadid, 57:25)

"...Bring me sheets of iron' - until, when he had leveled [them] between the two mountain walls, he said, 'Blow [with bellows]," until when he had made it [like] fire, he said, "Bring me, that I may pour over it molten copper."

(Surat al-Kahfi, 18:96)





Natural Resources are Subjected for Human Use

All the natural resources on and in this Earth are subjected for human use. In other words, they are able to provide humans with benefits.

As mentioned in the Quranic verses:

"And He has subjected to you whatever is in the heavens and whatever is on the earth - all from Him. Indeed in that are signs for a people who give thought."

(Surat al-Jathiyah, 45:13)

This concept of Islam which allows us to benefit from the resources that are available around us and below our feet, is a concept that is not present in any other religion, belief system, or law prior to Islam. Although the Muslim community may be slow to practice

the teachings that are already embedded within the Islamic concept. Islam will still be there as proof that anyone who is steadfast and practices the teachings of this concept, will be awarded with ways to succeed and excel in all fields. This is confirmed as in the Quranic verses:

"And if only the people of the cities had believed and feared Allah, We would have opened upon them blessings from the heaven and the earth; but they denied [the messengers], so We seized them for what they were earning."

(Surat al-A'raaf, 7:96)

This verse clearly shows that *iman* (faith) and *taqwa* (submission) are two important factors to obtain Allah SWT's gifts from the entire sky and Earth. This will be a guide for the Muslims who have faith, especially to derive benefits from Allah SWT's creations. This teaching is not only for the Muslims but generally for humankind. Whoever follows this teaching by Allah SWT will be able to reach their goals but if a person chooses to turn a

Today, does the wind that circulates around us brings with it the blessings from Allah or is it carrying poisons and pollutions that will spell disaster for us?





blind eye towards Allah's teachings, he will not benefit from the creator's gifts and will not succeed in this world or in the hereafter through his own fault. It is their loss that they do not benefit from their creator's gifts.

Islam lays the responsibility on humans themselves to live and work according to Allah SWT's orders. Their losses and profits in this world or in the hereafter depend on to what extent they have followed Islamic teachings in their lives.

There are five important aspects of human life, regardless if they are Muslim or non-Muslim; religion, body/soul (life), ancestry, mind, and wealth.

Wealth, which is the fifth aspect, is the veins in the economy of an individual. As it is an important aspect in human life, protecting it is considered as *wajib* (mandatory) in Islam.

Conclusion

Since wealth is important to fulfill many of the human needs as well as preserve and

protect the other four aspects of human life, it is mandatory for people with strength and ability to work and attain wealth through the right means. Islam hates an idle man, even if he becomes idle because he has already attained wealth. Islam fights to eliminate laziness by making it mandatory for every Muslim with a healthy and able body to work.

All the verses in the al-Quran that mentions natural resources cover all the aspects of human needs. They can be summarized as below:

- a) The Earth or its soil that is suitable for farming, all the fruits and plants derived from it, and the weather related to it; the effects of the sun, the moon, the stars, non-living things, water and rain.
- b) Various types of wood or timber.
- c) Livestock like chickens, ducks, goats, cows and others; animals used for transportations, reptilians, bees, silkworms, and other living things.





- d) Metals or other minerals
- e) Various types of fuel and oil derivative.
- f) Water sources; sea, river, spring and lake, covering all the important uses of water including sustaining life, as a source of energy mode for transportation, source of food, providing aesthetic value and irrigating farms, etc.
- g) Construction materials; or general materials needed by humans to fulfill their basic needs.
- h) All things underground or above the ground, even beyond the atmosphere that can be utilized by humans, be it in a physical form or an energy.

Your Role

1. Sharpen your knowledge and skills to manage natural resources in a sustainable and more efficient manner.
2. Refrain from practising greed, indifference, and wasteful behavior when utilising natural resources because these bad attitudes will contribute to the destruction of the environment and affect the supply of natural resources.





CHAPTER 3

ISLAM AND ENVIRONMENTAL SUSTAINABILITY

Abu Bakar Yang

The Islamic concept on environmental sustainability is an important dimension related to Islamic belief or *aqidah* (a branch of Islamic studies related to belief). This is because the concept of nature from an Islamic perspective teaches mankind about how the universe came into existence and the formation and development of the universe. It also clarifies the status and standing of the universe as one of God's creations, and explains nature's role towards us and vice versa our responsibility towards nature.

Enlivening and Enriching the Earth

The concepts of protecting and enriching the earth refer to the role and responsibility to be carried out by us to fulfill our responsibility as a caliph who manages, administrates and enriches the earth.

Green Earth Concept

One of the important Islamic management and conservation concepts is to ensure

Islam and Environmental Sustainability 39





the continuity of environmental well-being, accomplished through by according serious attention to creating a green earth by way of agricultural activities. To fulfill this responsibility, Allah SWT has laid out many infrastructures and facilities as explained by Allah SWT in the al-Quran:

“And it is He who sends down rain from the sky, and We produce thereby the growth of all things. We produce from it greenery from which We produce grains arranged in layers. And from the palm trees - of its emerging fruit are clusters hanging low. And [We produce] gardens of grapevines and olives and pomegranates, similar yet varied. Look at [each of] its fruit when it yields and [at] its

ripening. Indeed in that are signs for a people who believe.”

(Surat al-An'aam, 6:99)

The Green Earth concept which is explained in two ways in the al-Quran are:

Reasoning based on the benefits of Green Activities

Green activities and agricultural efforts carried out will provide huge benefits to mankind especially in the form of food source. Have we ever thought of how the efforts involved in making the earth greener not only increases sources of food but also provide many other benefits? How many of us realise the importance of vegetation to man?

It is estimated that around a third of land area on earth is covered with vegetation that serves the purpose of stabilising the earth's temperature and making the weather more conducive, conserving water supply and acting as shelter for mankind and animals alike. Plants are the only creation of Allah that is able to make their own food. Leaves

Allah describes His gift to mankind in the form of dates, olives, pomegranates and more as mentioned in Surat al-An'aam, verse 99 which says the meaning:

“Look at their fruits as they yield and ripen.”





growing on plants are able to absorb carbon dioxide and release oxygen into the atmosphere. The results of these processes stabilize the gas content in the air and at the same time regulate the earth's temperature and weather. Besides this, plants are also a source of medicinal herbs effective in treating various diseases.

Nearly half of the medicine available today is derived from plants. Around 3,000 types of plants are known to be able to heal cancer and various other diseases, and from the Amazon rainforest alone there are more than 2,000 types of plants that can be used for medicinal purposes. Therefore, by destroying the rainforest without any important and valid reason and cause, we are actually losing the gift given to us by Allah. Every year, tropical rainforests go through massive and unsettling destructions especially in certain parts of Africa, Asia as well as Central and South America. Deforestation involves an area of around 14-20 million hectares. In European countries too, 50 million hectares of forest area are found to be ruined by acid rain (statistics taken from the United Nation Global



Environment (UNGE) – Our Planet magazine, 1991).

The importance placed by Islam on the efforts to protecting the environment could also be found in the hadith of the Prophet Muhammad (pbuh) in which he said:

"Whoever plants a tree and takes care of it until it begins to produce fruits will reap benefits in the hereafter"

(Hadith narrated by al-Bukhari and Muslim)

The Prophet said again:

"There is none amongst the Muslims who plants a tree or sows seeds, and then a bird, or a





person or an animal eats from it, but is regarded as a charitable gift for him".

(Hadith narrated by Imam Ahmad)

Therefore, it is most unfortunate for man if unsustainable deforestation continues because the permanent loss from doing so



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outweighs the short-term gains such practice accords. In contrast, rewards reaped through activities that protect and promote the environment through Islamic and sustainable means not only bring about benefits in this life on earth but also one is rewarded in this life and the hereafter.

Reasoning Based on Beauty of Nature

The second reason is often misunderstood by those who believe that Islam does not pay attention to beauty since they cannot find any basis for it in neither the al-Quran nor the as-Sunnah. In reality, what they believe to be true is far from the truth, as Allah Himself is The Most Magnificent and He loves all that is beautiful. In reference to this concept of beauty, Allah has said in the al-Quran:

"[More precisely], is He [not best] who created the heavens and the earth and sent down for you rain from the sky, causing to grow thereby gardens of joyful beauty which you could not [otherwise] have grown the trees thereof? Is there a deity with Allah? [No], but





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they are a people who ascribe equals [to Him]."

(Surat an-Naml, 27: 6)

The verse above clearly uses the words 'gardens of joyful beauty' and is phrased beautifully which also indicates its cool and calm properties for the soul and soothing to the eyes.

Next Allah mentions about His gifts in the form of a garden of dates, olives,

pomegranates and more (refer surat al-An'aam, 6:99).

In this particular verse, mankind is asked to pay attention to the ripened fruits as a form of instruction to enjoy the beautiful and magnificent harvests. Imam al-Qurtubi in his translation *Ahkam al-Quran li al Jashash* said: 'Agriculture is a part of *fardhu kifayah*, therefore the ruler needs to get the people to carry it out, whereby a form of this effort is through planting trees.'

The responsibility of protecting and promoting the environment is one that is continuous for as long as the earth remains in existence. This matter has been explained in a hadith by the Prophet (pbuh) as follows:

"If the Hour (the day of Resurrection) is about to be established and one of you were holding a palm shoot, let him take advantage of even one second before the Hour is established to plant it."

(Hadith narrated by Imam Ahmad and al-Bukhari)



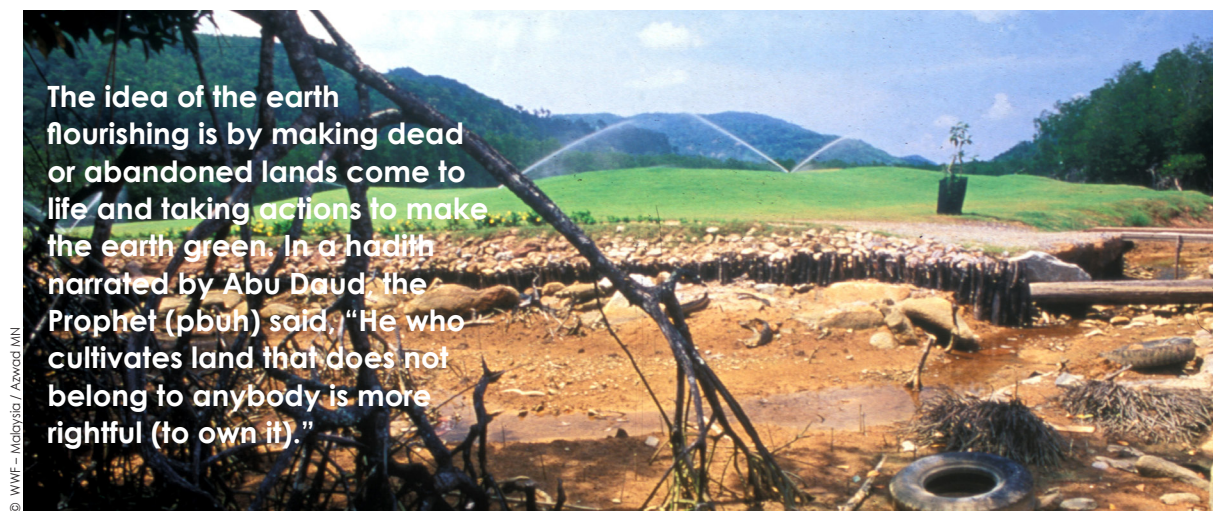


This hadith clearly shows us how important the responsibility or effort to plant vegetation is, even when facing the day of resurrection. It also describes for us that the efforts to look after the environment is a responsibility that should be given priority because Allah has created it as such that the earth will not be able to play its role well without the presence of vegetation. Without vegetation, the natural balance of the earth will be badly affected and the life cycle of living beings on earth will be affected as well. Modern scientific studies have proven that promoting and protecting the environment benefits the continued existence of the earth. It is not only a primary food

source for living beings but also an agent that keeps nature in balance.

Cultivating Dead Lands

Among the teachings found in the Islamic principles that have become an important concept in the management of the environment is the cultivation of dead lands. According to Ibn Qudamah in his book *al-Mughni* and al-Azhari in his book *ash-Shahah*, a dead land is one that has no owner, no source of water, no building being built on it and no measures taken to develop it as well as being a land that cannot be utilised.



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The concept of cultivating dead lands is one found in the Islamic knowledge treasure trove and is taken from the words of the Prophet (pbuh) with the following meaning:

"He who cultivates land that does not belong to anybody is more rightful (to own it)."

(Hadith narrated by Abu Daud)

In relation to the reality of today, a land that has been over-used by development until it cannot be used anymore is also categorised as a dead land. One such example is the land in Chernobyl, Russia, which has been contaminated by horrendous radiation effects in the 80s which resulted in its land, water, air and environment to no longer be safe for use or to be lived in.

Allah SWT has explained the definition of land that is fertile as well as land that is dead through the al-Quran:

"And a sign for them is the dead earth. We have brought it to life and brought forth from it grain, and from it they eat."

(Surat Yaasin, 36: 33)



Allah said further:

"As provision for the servants, and We have given life thereby to a dead land. Thus is the resurrection."

(Surat Qaaf, 50:11)

This presents the importance in the scriptures to bring to life a dead land especially through agricultural activities and other endeavours. This helps promote a green earth which is given emphasis in Islam. Activities involved in converting a dead land into a green area does not only protect the environment but also enables mankind's needs to be fulfilled.

Other than that, these efforts are categorised as an activity that is a priority and recommended in Islam, and for those involved in expanding the agricultural sector



and increasing land produce it promises to be greatly rewarding.

It also has to be understood that the efforts in bringing dead lands to life through agricultural activity is the first stage, since to ensure the success of agricultural efforts, there are other actions that need to be carried out such as watering the dead area with a proper irrigation system because vegetation cannot grow without water.

Next, after the land has been brought to life through agricultural and green activities and proper irrigation, this dead land will surely have buildings built on it for human settlement. With this, an area that was previously dead would now have life on it and bring benefit to mankind. Therefore, there are two major benefits to be reaped by man and other living things through efforts of bringing lands to life with agricultural activities.

The results following greening activities on dead lands will be the birth of a productive community of people as there will be other activities to support these greening efforts

such as irrigation, settlements, setting up factories to process agricultural produce, and activities involving basic human needs such as education and health.

Cleanliness and Our Health

Islam gives priority to cleanliness that will in turn ensure our good health. Therefore, cleanliness is seen as an act of worship that should be a requirement in our life. One's health is important because good health is Allah's greatest gift to mankind.

The Concept of Cleanliness

Among the concepts promoted by Islam in ensuring environmental well-being is the act of cleanliness. If you go through any book on the Islamic sharia, the first part that will be discussed is a chapter on *taharah* or sanitation. This is the first lesson studied by every Muslim in the field of *fiqh* because cleanliness is the key to perfect worship and of the worship being accepted. For example, a Muslim's *solah* (prayer) is not accepted until he has cleaned himself from *hadath* or impurities. The same





applies for a Muslim when preparing for *solah*. A Muslim's clothes, prayer area and his whole self be clean before he performs the *solah*. With regards to this matter Allah said:

"O you who have believed, when you rise to [perform] prayer, wash your faces and your forearms to the elbows and wipe over your heads and wash your feet to the ankles. And if you are in a state of janabah, then purify yourselves. But if you are ill or on a journey or one of you comes from the place of relieving himself or you have contacted women and do not find water, then seek clean earth and wipe over your faces and hands with it. Allah does not intend to make it difficult for you,



but He intends to purify you and complete His favor upon you that you may be grateful."

(Surat al-Maidah, 5:6)

Islam also requires that you cleanse any private part where urine or stool has passed through. Also mentioned specifically in the al-Quran is with regards to women and cleanliness as said by Allah:

"And they ask you about menstruation. Say, 'It is impure, so keep away from wives during menstruation. And do not approach them until they are pure. And when they have purified themselves, then come to them from where Allah has ordained for you.' Indeed, Allah loves those who are constantly repentant and loves those who purify themselves."

(Surat al-Baqarah, 2: 222)

Allah further said:

"Within it are men who love to purify themselves; and Allah loves those who purify themselves."

(Surat at-Taubah, 9: 108)





Prophet (pbuh) has also said in a hadith narrated by Muslim from Abu Malik al-Asy'ari when discussing the chapter on *thaharah*:

"Cleanliness is half of faith."

The Prophet also often reminds one to care for the cleanliness of the mouth and teeth and promotes the use of *miswak* which is a type of plant used to brush the teeth, among the things mentioned:

"The Miswak (tooth-stick) cleanses and purifies the mouth and pleases Allah."

Next, the Prophet said:

"He who has hair should honour it. "

(Hadith narrated by Abu Daud
from Abu Hurairah (4151))

The Concept of Health Care

Among mankind's main responsibility that has been given emphasis is to care for his health. Some people including Muslims may have misconceptions about the clarity on the issue of health in Islam. This belief is based on their understanding that a religion would only focus on spiritual aspects and leave out aspects which are related to worldly matters. Religion is seen as leaning more towards the afterlife and leaving no space for matters related to life in the present world. Should this view be true, it may apply to some other religions, but it is not what Islam teaches. The truth is that Islam is a religion that attends to both worldly matters and matters of the afterlife.





In the al-Quran and the hadith of the Prophet Muhammad (pbuh), a lot of emphasis is given to health care, regardless of whether it is related to the physical, mental or spiritual health. This priority is taught in the form of knowledge, understanding as well as principles and Muslims are obligated to practice them.

Without a clean and healthy environment, the health of mankind would be

affected. To ensure a healthy and clean environment, a good, well-planned and systematic management of the environment is required. The discussion in this portion will explain several Islamic concepts related to the importance of health and health care as well as the views that are parallel from this concept that brings awareness to care for and to manage the natural environment well.

Health Is a Gift

Good health is the greatest gift that Allah has bestowed upon His servants. We need to appreciate this gift by being grateful for it resulting in it being made more plentiful by Allah. This matter has been explained by Allah in the al-Quran as the following:

"And [remember] when your Lord proclaimed, 'If you are grateful, I will surely increase you [in favour]; but if you deny, indeed, My punishment is severe.'"

(Surat Ibrahim, 14: 7)

In Islam it is necessary for mankind to be grateful for this gift and ensure the continued



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existence of nature so that it is able to provide a better, safer and more conducive environment. This also applies to being grateful for the gift of a natural environment which provides a healthy and comfortable ambience.

According to the views of several Islamic scholars such as Imam Ibn Qayyim, perfect health can only be achieved when a Muslim practices the sunnah (teachings) of the Prophet (pbuh) because every aspect of the life of Prophet (pbuh) are examples to be emulated. The Prophet (pbuh) was always concerned about how to manage a life that will receive the blessings of Allah such as the way he ate and drank, his waking and sleeping hours, his time for worship and rest, time

to manage matters related to the country, the society and his family, and ensuring that all activities and affairs with mankind and the surrounding environment is in obedience to the commands of Allah. Should all these be carried out in moderation and suited to one's physical capability, environment, mental and spiritual capabilities, God-willing mankind will be able to achieve the optimum level of health.

Equally important is the role in ensuring the best environment which provides a healthy ambience because without a safe and natural environment, it would be impossible for mankind to live healthily. Good health begins from a natural environment that is healthy and well-managed.

The Prophet (pbuh) reminded every Muslim to take care of the cleanliness of their homes and surroundings, and the Prophet has said:

“Allah is Good and likes what is fragrant; He is Clean and likes cleanliness; He is Generous and likes generosity; he is Munificent and likes munificence. So clean, and do not imitate the Jews.”

Health Management Is Obligatory

One of the ways to ensure a safe life is by taking care of one's health. Should one's health be in danger, one's life too would be threatened especially when the disease involved is fatal. The same applies for the care of one's mind. Our mind and thoughts it generates





are dependent on its good health. It would be impossible for one to be able to think and make good decisions if his mind and body were not healthy because a healthy mind lives in a healthy body. Therefore it is obligatory for every Muslim to ensure that his body and mind are always in good health, cared for and protected from any disturbing disease or matters that can disrupt them.

Health thus plays an important role in ensuring the responsibility of the *maqasid shariah* is carried out.

Being Environmentally Friendly

Islam teaches every Muslim to interact well with his environment. In a hadith narrated by Imam Muslim from Syadad ibn Aus, the Prophet (pbuh) said:

"It is compulsory for one to do good towards everyone and everything"

A lesson that is clear from this hadith is that one is responsible for interacting well with everything that is created by Allah. While in

the context of our relationship with the natural environment, this hadith brings the meaning that we are obligated to interact responsibly, whether in using natural resources to fulfill our needs or in managing and sustaining the environment for the sake of security and the continued existence of the natural environment itself.

There are two main concepts which are being emphasised in this portion that is the concept of '*ihsan* and fairness in Islam towards the natural environment' and the concept of 'managing and treating other living beings created by Allah well.'

The Concept of Fairness and Ihsan as A Basis To Human Behaviour

Fairness is an important concept in Islam, and many verses in the al-Quran calls for mankind to act fairly and ensure that fairness is practised in every aspect of human life. When mankind is involved in an activity interacting with one another or with other living beings in this world, no issues will be raised with regards to the question of fairness. However, in the present reality, too many cases of unfairness





occur in our daily life. This includes being unfair to one's self, family, society, country and religion. In the context of this book this includes unfairness towards the environment. To understand clearly the idea and concept of fairness practiced in Islam, the discussion below is important.

The al-Quran has assertively determined acts of fairness and also explains the characteristics of fairness to mankind. Among the verses of the al-Quran that reminds mankind to act fairly is as follows:

"Indeed, Allah commands you to render trusts to whom they are due and when you judge between people to judge with justice..."
(Surat an-Nisa', 4: 58)

"...And give full measure and weight in justice..."
(Surat al-An'aam, 6: 152)

"Say, [O Muhammad], 'My Lord has ordered justice and that you maintain yourselves [in worship of Him] at every place [or time] of prostration, and invoke Him,

sincere to Him in religion.' Just as He originated you, you will return [to life] "

(Surat al-A'raaf, 7: 29)

"We have already sent Our messengers with clear evidences and sent down with them the Scripture and the balance that the people may maintain [their affairs] in justice..."

(Surat al-Hadid, 57:25)

The Quranic verses above also define the concept of fairness which is of importance. The first definition explains the concept of fairness in a wider context covering all aspects of human life. As an example, in verse 29 of the surat al-A'raaf, fairness can be referred to or understood as being honest to oneself.

The second definition describes fairness as a balance, leverage ratio and harmony as well as being pictured as fairness from a legal perspective that is to give mandate to the rightful recipient. Besides this, there are many verses which refer to the creation of man based on ratio, suitability and spirituality with various preferences and inborn





characteristics which show the fairness of Allah. Verse 25 of surat *al-Hadid* above explains a way of life that is balanced and true in reference to 'obedience towards justice'. Verses from surat *an-Nahl* and *al-A'raaf* explain the elements of evil-doings, hatred, sinful acts and the breaching of the boundaries of justice and truth.

The use of the word justice/fairness in Quranic verses and also the implications of following or going against the commands of Allah are also explained in other verses in the al-Quran. All this describes clearly the concept of fairness and the approach that gives mandate to the rightful recipient, but also emphasises the importance of creating balance and harmony in matters related to managing our lives.

This concept of fairness relates to acts of fairness towards the environment which is a management of the environment that is well-planned and intelligent, and creates an environment that is in balance and in harmony. It is this concept of fairness that needs to be used in the management of the environment

in accordance to Islam. In other words, as Muslims we should be reaping benefits from natural resources, but at the same time we should be managing the natural resources in a sustainable manner to ensure its protection. Therefore, justice is ensured through fairness. By balancing use and management of natural resource fairness will remain in interactions in the life of mankind and with nature itself.

The concept of *ihsan* refers to behaviors that are good, honest, sympathetic, cooperative, an approach that is humanitarian and sincere, taking care and giving priority to the rights of other man and beings. It also means giving something more than what is required or being satisfied with something even though it's value is less than it should be. If justice is regarded as a base for a harmonious society, then *ihsan* is the adornment which makes it complete and perfect as well as more beautiful. If justice can save a society from social ills and evil-doings, *ihsan* on the other hand makes life more friendly and orderly.

Meanwhile, Syed Abul A'la al-Maududi in his book *Understanding the al-Quran* defines





ihsan as observing, loving, healing, respecting and caring. If these characteristics of *ihsan* do not exist in society then there will not exist the feeling of love, gratefulness, sincerity, sacrifice and care. Without these important values, there is no love and joy in one's life, and it is impossible to build and develop a society that is ideal and complete.

The two definitions of *ihsan* clearly defines its role in life. It also defines our interaction with the environment. It is obligatory for us to treat nature in a manner that is fair and *ihsan*, protecting and preserving, caring and sustaining it, as well as treating nature with love and respect. We should not be exploiting nature viciously, without any care, and to ruin and damage it. This matter has been mentioned by Allah in the al-Quran as follow:

"But seek, through that which Allah has given you, the home of the Hereafter; and [yet], do not forget your share of the world. And do good as Allah has done good to you. And desire not corruption in the land. Indeed, Allah does not like corrupters."

(Surat al-Qasas, 28: 77)

While the concept of fairness requires honest judgment, the concept of *ihsan* reminds us to be fair in our consideration towards others. What is required in Islam through the concept of fairness and *ihsan* is the effort to form a relationship based on sincerity, well-being, sacrifice and interaction that is positive, because these characteristics would ensure the existence of a society that is truly humanitarian in all aspects of daily life activities. When such relationship exists between man and his environment, then surely the future of the environment will be better safe and secured.

Managing and Being Kind To Other Living Beings

This section discusses how we should interact with one another and with other living beings created by Allah that are also inhabitants of this world. This concept needs to be clearly understood because our life model is different from that of other living beings. Allah elected humans as caliph with a responsibility to administrate and manage this world. If managed well, then we are able to secure a more comfortable way of living and one that is easily shared with other living creatures.





Being Kind to One Another

The responsibility of humans to treat one another well is a responsibility that cannot be disregarded, whether or not one is deemed religious. We are all slaves of Allah and have our rights as human beings. With regards to this matter, Allah said:

"So by mercy from Allah, [O Muhammad], you were lenient with them. And if you had been rude [in speech] and harsh in heart, they would have disbanded from about you. So pardon them and ask forgiveness for them and consult them in the matter. And when you have decided, then rely upon Allah. Indeed, Allah loves those who rely [upon Him]."

(Surat Ali Imran, 3: 159)

Allah said:

"There has certainly come to you a Messenger from among yourselves. Grievous to him is what you suffer; [he is] concerned over you and to the believers is kind and

merciful."

(Surat at-Taubah, 9: 128)

Allah has also mentioned about the responsibility to do good to even non-muslims:

"Allah does not forbid you from those who do not fight you because of religion and do not expel you from your homes - from being





righteous toward them and acting justly toward them. Indeed, Allah loves those who act justly."

(Surat al-Mumtahanah, 60: 8)

The words *al-qist* in the above verse means 'being fair'. In the previous discussion it was stated that an act of charity that is bigger and better than being fair is 'to do good or *ihsan*'. Meanwhile in other verses of the al-Quran, Allah stated the importance of doing good unto the weak, from orphans, the poor, *ibnu sabil*, widowers, and also to others who can be categorised as the weaker group. In another verse, Allah has explained further several human rights that need to be adhered by a good Muslim:

"Worship Allah and associate nothing with Him, and to parents do good, and to relatives, orphans, the needy, the near neighbor, the neighbor farther away, the companion at your side, the traveller, and those whom your right hands possess. Indeed, Allah does not like those who are self-deluded and boastful."

(Surat an-Nisa', 4: 36)

Other than that, Islam asks that every individual does good towards other creatures created by Allah, and is a good guide when discussing man's relationship with his environment. This matter was touched upon by the Prophet (pbuh) when he said:

"The Compassionate One has mercy on those who are merciful. If you show mercy to those who are on the earth, He Who is in the heaven will show mercy to you."

(Hadith narrated by Abu Daud and Tirmizi from Ibn. Amru)

Being Kind towards Animals

Another important concept promoted by Islam is the responsibility of its followers to be kind and gentle towards animals. Allah with all His Powers and Gifts has created many types of animals in this world. From the smallest of animals to the most enormous of them. There are animals that are weak and those that are strong. All these animals living which live on earth and created by Allah have been each given their share of sustenance and portions. All this reflects the Greatness of Allah, the Most





Beneficent and the sole Creator. He created animals to benefit humans in many ways. In this matter Allah has said:

"Do they not see that We have created for them from what Our hands have made, grazing live-stock, and [then] they are their owners? And We have tamed them for them, so some of them they ride, and some of them they eat. And for them therein are [other] benefits and drinks, so will they not be grateful?"

(Surat Yaasin, 36: 71-73)

In a different event, the Prophet had seen his companion burning an anthill, and he said,



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"Only the Lord of the Fire should punish with fire"

(Hadith narrated by Abu Daud).

In a hadith narrated by Imam Ahmad and Ibn Majah from Ibn Umar, the Prophet ordered for them to slaughter animals using a sharp knife, and to bury the animal parts that are not being used, and the Prophet also said:

"Verily, Allah has enjoined excellence (ihsan) with regard to everything. So, when you kill, kill in a good way; when you slaughter, slaughter in a good way; so everyone of you should sharpen his knife, and let the slaughtered animal die comfortably."





In another hadith, the Prophet said:

"A woman entered the (Hell) Fire because of a cat which she had tied, neither giving it food nor setting it free to eat from the vermin of the earth."

(Hadith narrated by al-Bukhari)

In another event the Prophet was asked if acts of charity even to the animals were rewarded by God. He replied:

"Yes, there is a reward for acts of charity to every beast alive"

(Hadith narrated by al-Bukhari and Muslim).



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There are many other hadith and events that can be used as lessons and guidelines for Muslims on how we should interact with animals. Islam encourages humans to be kind to animals, big or small. The reason for this is that the animals provide benefits to us humans. More importantly there is a moral reason for being kind to animals, and that is the notion of being noble and considerate to all living things. Islam centres attention on matters such as how to prevent animal cruelty and abuse as well as how to stop from endangering these animals.

Animals too feel pain and have feelings that have been given to them by Allah. Therefore, it is necessary for humans to play their role as managers and administrators of this world and take all these matters into account.

Being Kind to Plants

Islam stresses that among the good deeds that you can do for the environment is by being kind to plants and trees and treating them well. This is based on the concept that





humans hold the responsibility as a caliph of Allah on earth. The responsibility to enrich the environment can only be achieved when every living being's needs are fulfilled and, they are improved and protection is given to them from destruction, danger and pollution that could harm.

In one hadith, it is explained about the advantages or rewards that will be reaped by those who plant trees, as said by the Prophet (pbuh):

"When a Muslim plants a tree, whatever is eaten from it is charity from him and whatever is stolen is charity and whatever is subtracted from it is charity."

(Hadith narrated by
Imam Ahmad)

The Prophet also gave stern warning to those who cut down trees without any purpose when the plants are harvested and were not put to use. Islam has provisions for such behaviours and is concerned with such wasteful actions. Plants are given a place of importance due to the benefits it provides to

man and other living beings who share the world with us.

Although this is true, it does not mean that all trees on earth cannot be cut down. Man needs to consider carefully the use of the trees and plants harvested, and to be sparing when cutting down trees or clearing areas, and that this action does not have an impact on other life forms including humans. It also means that plants and trees can play the role of helping to sustain and protect life on earth. This also functions to ensure the continued existence of humans and other life forms.

Being Kind to Land and Water

The concept of being kind to Allah's creatures refers to not only the living forms but also the non-living forms which man can greatly benefit from. Among these which will be discussed are land and water.

We have a responsibility to take care of the land or earth where we live in since it is here that we walk, earn a living, build a life, farm and do all our daily activities. Allah created this earth as a suitable place to live in,





fertile lands for agriculture, and a place suited for animals to breed. Man and other animals who live on earth will one day return to the ground and face Judgment Day. In the al-Quran, there are many verses which touch on land specifically. It is referred to as earth, and some of the verses that touch on this include:

"[It is He] who has made for you the earth as a bed [spread out] and inserted therein for you roadways and sent down from the sky, rain and produced thereby categories of various plants. Eat [there from] and pasture your livestock. Indeed, in that are signs for those of intelligence."

(Surat Thaaha, 20: 53-54)

From the above verses, it is clear to us that land is a natural resource that is invaluable. Land is an important source of life support to all creatures on earth, including man.

However sadly today, due to human greed and irresponsibility, land management has caused the destruction of this resource. More than 10,000 years ago, when man

began to understand and develop land, a lot of changes were made to the structure of lands. Approaching the 21st century, we have witnessed drastic changes on the surface of this earth. The increase of human population which involved urbanization, constructions of roads and buildings, household and industrial waste management, mining, forest clearing and modern agriculture are some of the human activities that have created changes to the land which may not be positive.

There is a Malay proverb which says: "There's nothing to lose by doing good unto land." This saying has some truth in it because lands that have fertile soil and good watering system will bring plentiful of resources to those who work hard on it. This matter has been mentioned by Allah in the following verse:

"And the good land - its vegetation emerges by permission of its Lord; but that which is bad - nothing emerges except sparsely, with difficulty. Thus do We diversify the signs for a people who are grateful."

(Surat al-A'raaf, 7: 58)





The scripture also has many examples of caring for water as the main element in human life. Allah reminds man to make good use of water as it is the basic element from which man is created. This matter is mentioned by Allah in surat *al-Anbiyaa'*, verse 30.

This particular verse teaches man that water is a source for life on the surface of this earth. It would be impossible for creatures to live in this world without water. History also proves that any form of life and human dwellings would begin where there is water. It is from water sources that man begins agricultural and animal farming activities and from here begins the human civilization which continues to develop until today.

It is therefore not abnormal for man to gather in a place and form a community around areas with water sources. It would be impossible to live without water and human activities of all kinds depend on water to the extent where even the human body consists mainly of water.

Based on this huge and important role of water, all living beings on earth are highly dependent on it. The right to use water belongs to every individual and it cannot be monopolized, ruined or contaminated at anyone's whim. When it comes to caring for water, a Muslim has three responsibilities to fulfill:

- (i) We have to realise that water is a gift





from Allah which we need to be grateful for. With regards to this matter, Imam Muslim in his book narrated from Anas that the Prophet said:

"Verily Allah bless His slaves who are thankful to Him when eating and drinking something"

(Hadith narrated by Muslim).

In the practice of cleansing oneself using water, the Prophet teachings is this prayers which is to be recited every time a Muslim completes his ablution, *"O Allah, make me of those who return to You often in repentance and make me of those who remain clean and pure."*

- (ii) We have to ensure that water resources are always clean and not contaminated. Water that is contaminated and dirty will bring about dangerous diseases. For this reason, Islam stresses the importance of water cleanliness and divides water into several categories.
- (iii) We should use water wisely and avoid wastage. In Islam, improper use of



water or overuse of water for whatever purposes is not allowed. There are many lessons and guidelines given by the Prophet in matters related to avoiding wastage when using water. For example, in one incidence, an Arab Bedouin came to see the Prophet and asked how to perform ablution, and the Prophet showed him while repeating his action three times and saying:

"This is how ablution should be performed. If anyone does more or less than this, he has done wrong and transgressed, or (said) transgressed and done wrong."

(Hadith narrated by Abu Daud)





It clearly shows that gifts in all forms that are given from Allah to man must be cared for. In other words, given the responsibility as a Caliph on the surface of this earth, man needs to manage all these gifts intelligently based on the guidelines outlined by Islam.

As narrated by Ibn Majah the Prophet once said while witnessing a young man perform his ablution:

“Do not waste water, even if you perform your ablution on the banks of an abundantly flowing river.”

(Hadith narrated by Ibn Majah)

Protecting the Environment against Destruction

In our effort to manage, care for and conserve the environment, Islam focuses on moral obligations, legal rulings and putting in more efforts towards its growth and aesthetic values. In line with this, Islam also forbids any form of environmental abuse and regards it as a sinful act which will be rightfully punished by Allah. Therefore every form of abuse must be

stopped. From the Islamic perspective, there are several forms of environmental abuse, each with its own motive. Initially, these abuses come from uncontrolled actions, needs and emotions which in the end bring about destruction of the environment.

Destruction with Aggression as a Motive

Among the forms of destruction that is forbidden by Islam is destruction in the form of aggression towards the creatures of Allah, especially animal species. This matter has been discussed in a hadith previously discussed whereby a woman was punished by Allah for caging a cat and leaving it without food and water until it eventually died. These types of actions are seen as cruel and inhuman and the person committing it should be rightfully punished. There are people who do not care about other creatures of Allah. This may be due to some early education they received which shaped the way they think and behave or it could be that they want revenge against animals after being involved in a certain animal-related incident.





If early education teaches a person to become destructive towards the environment, what needs to be done to these people is to re-educate them through Islamic teachings to become those who conserve the environment and not destroy it. In terms of aggression towards the environment due to feelings of vengeance as a result of specific events, man need to realize that these creatures are acting on instinct and they do not have mental capacities as humans do to reason. When animals do something, it is based on natural instincts given to them by Allah. Therefore, it is not acceptable for humans who have been gifted with reasoning capacities to resort to harm animals or plants due to revenge from a hurt they had experienced from these non-human creatures.

Destruction Based on Anger

Another motive for destruction against the environment which is forbidden in Islam is destruction due to anger. Feelings of anger often cause someone to be impulsive and insane as well as be morally wrong. Based on this reason, there was an incident where a



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man came to see the Prophet to seek for advice and the Prophet said: "Do not be angry" and he repeated it three times to show how important it is for a Muslim to control his anger.

It is because of this that a religious person has to have his emotions under control and to avoid being angry. As a caliph on the surface of this earth, a person needs to control his anger. It would not be positive for the world to be ruled by feelings of anger. A person also needs to manage his desires until he can differentiate himself from animals.

Destruction for Reasons that are Futile

The next form of destruction prohibited in Islamic law is destruction for purposes that





are futile where it is done without a specific purpose. In a hadith narrated by Ibn Umar, he told of an incident when he was walking pass two Quraisy men who were shooting arrows at a bird. After noticing Ibn Umar, the two men stopped what they were doing. Ibn Umar approached them and said:

"Who's doing is this? Allah will severely punish the person who did this because the Prophet condemns anyone who tortures the living purposefully."

(Hadith narrated by al-Bukhari and Muslim)

It is clear from this story that the Quraisy men were doing something that was futile by causing harm to animals and Ibn Umar reminded them of Allah's punishment towards those who commit similar cruel acts.

Islam teaches Muslims to always take special care when interacting with other living creatures in this world. It is forbidden to be involved in any form of oppression or torture towards these creatures because they too have rights and the need to be defended.



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Any breach of the rights mentioned is considered going against the Islamic law and will be punished by Allah. In a hadith which was discussed previously under the topic of being kind to animal, it has been explained about the warnings given by the Prophet on ill-treating birds. The hadith shows the bigger picture of that any form of abuse towards other living creatures is forbidden and needs to be avoided.





Destruction without Pressing Needs

The next type of destruction forbidden by the Islamic law is one that is done without any necessary purpose or pressing needs. This kind of destruction is committed due to man's ignorance or to fulfill a personal ambition.

In Arab countries with blazing hot deserts, several types of trees can be found. One such tree is called the Sidra Tree. This sturdy tree forms a shade for man and animals, its fruits can be eaten and it has many other uses. Therefore, the Arabs traditionally use the term Sidra Tree (as-sidrah) to especially refer to trees that provide many benefits to mankind.

Abu Daud explained from a hadith that:

"Those who cut down the trees in open spaces or desert, which is the place became the travelers and animal shelter, then the action is futile and wrong, and Allah will dip his head into the hell fire"

(Hadith narrated by Abu Daud)



Therefore, the threat of hellfire to those who cut down trees which provide many benefits to creatures of this earth shows the concern and attention which Islam gives to the maintenance and the preservation of the environment. Without this threat which is a punishment from Allah, man may do whatever they want towards the environment based on their desire even though the action is done without any sound purpose or necessity.

Although this is so, Islam has led human efforts in saving this world since thousands of years ago. The only problem is that no actions have been taken in the name of Islam to protect, care, preserve and manage the environment. Allah often reminds us that the





destructions that occur are due to man's greed and stupidity, as mentioned in the Quran:

"Indeed, we offered the Trust to the heavens and the earth and the mountains, and they declined to bear it and feared it; but man [undertook to] bear it. Indeed, he was unjust and ignorant."

(Surat al-Ahzab, 33: 72)

Destruction Due to Negligence or Ignorance

Another form of destruction which is forbidden in Islam is one due to negligence or ignorance towards something. Whether it is towards animals, plants, or dead creatures, and especially so if it is something of value and economic importance. There are many examples which can be provided of destruction due to negligence or ignorance.

Among them are negligence in caring for animals to the extent of leaving them hungry and later die, negligence towards plants

leading them to be ruined by insect attacks and diseases, leaving fruits or seeds to rot and eaten by worms, neglect in taking care of buildings, factories or warehouses until they crumble down and become infested with termites, neglect in caring for equipment and causing them to be broken, neglect in caring for water reserves causing them to become damaged, polluted and giving way to arising problems in providing clean water supply. There are many other examples which frequently occur in the society which leads to huge loss to individuals or a whole society and even the country.

In a wider context an example of negligence which directly affect a country's



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economy is such as neglecting or wasting fertile agricultural land by not putting in any effort to reap benefits from it. We have also neglected to benefit from the many animals created by Allah such as using its meat, milk and fur, even though all this has been mentioned many times by Allah in the Quran as a reminder to man.

In matters concerning wastage of Allah's gifts, Allah's Apostle himself have condemned those who do not make use of a dead goat's skin. This incident has been narrated by Ibn Abbas, where one day the while the Prophet was walking, he came across a dead goat and said, *"Why did you not benefit by its skin?"* He said: *"Only the eating thereof is forbidden"* (Hadith narrated by Ibn Abbas).

Prohibition against Destruction during War

Another special requirement in Islam which is not found in any other religion is the prohibition to cause destruction even during times of war. In times of war massive destruction occurs, whether it is towards humans, buildings, animals, plants or the whole world. In Islam,

it is forbidden to cause damage unless there is a pressing need such as the war in which Muslim soldiers successfully besieged the Jewish tribe of Bani Nadhir who were hiding in a date farm. The Bani Nadhir soldiers did not expect the Muslim soldiers to attack them in a date farm thinking that Islam forbids such doings.

However, due to a pressing need Islam allows attacks involving act of destruction, hence Allah permitted the Prophet to cut down a portion of the trees in the farm to enable them to hunt down the enemies hiding there. The Bani Nadhirs then said, *"O' Muhammad, you forbid acts of destruction but why is it that you yourself commit it today?"* To answer their taunt, Allah descended the following Quranic verse with the meaning:

"Whatever you have cut down of [their] palm trees or left standing on their trunks - it was by permission of Allah and so He would disgrace the defiantly disobedient."

(Surat al-Hasyr, 59: 5)





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Caliph Abu Bakr had advised the same to Muslim soldiers who were sent to the battlefield in Syam (now known as Syria), as told by Yahya ibn. Said, Abu Bakr had reminded Yazid ibn. Abi Sufyan, who headed the group of Muslim soldiers, of the following ten matters:

- ☐ Do not kill children.
- ☐ Do not kill women.
- ☐ Do not kill the old.
- ☐ Do not cut down fruit-bearing trees.
- ☐ Do not burn down buildings.
- ☐ Do not slaughter animals unless to be eaten.
- ☐ Do not damage date trees.
- ☐ Do not burn date trees.
- ☐ Do not commit acts of treachery.

The reminder given by Caliph Abu Bakr to Yazid Abu Sufian is a principle taught by Islam to be practised during war. It is forbidden to destroy the environment except in pressing situations. It is different from the wars occurring in recent times where fighting a war is aimed to not only defeat the enemy but to destroy the environment surrounding the enemy's area.

Ensuring that Environmental Balance is Maintained

Another important concept that Islam stresses is the relationship between man and the environment to maintain the existing balance and to avoid any form of destruction that could affect this balance. Surely Allah did not create something in this universe in vain or without any purpose. Everything is created with perfection, according to the required measurements, and placed in its rightful place. Allah said:

"He to whom belongs the dominion of the heavens and the earth and who has not taken a son and has not had a partner in dominion"



*and has created each thing
and determined it with [precise]
determination."*

(Surat al-Furqan, 25: 2)

*"The sun and the moon [move] by
precise calculation, and the stars
and trees prostrate. And the heav-
en He raised and imposed the
balance that you not transgress
within the balance. And establish
weight in justice and do not make
deficient the balance."*

(Surat ar-Rahman, 55: 5-9)

These are the concepts which Islam wants to instill in relationships between man and his environment that is to be fair and moderate in ensuring the continued balance of the environment. The relationship existing between man and the environment is one that does not trespass the prescribed borders and is not done in ignorance or disparaging the importance of the said balance. Both attitudes are considered disgraceful and should be avoided, while being moderate is a laudable trait that should be practised. This is in line with Allah's words in the Quran:

*"And thus we have made you a
just community..."*

(Surat al-Baqarah, 2: 143).

The concept of fairness, moderation and balance such as these need to be applied by man in all matters of life until they become the chosen people, especially in the context of their interaction with the environment which is balanced in nature. This is because balance is the key to wellbeing. Without balance, a system cannot exist in perfection, and the same goes for the environment which Allah created in balance.

Conclusion

The balance in the environment is one that is whole and dynamic surpassing all aspects of existence, situation and condition. There is no disharmony in this physical world although its contents are various and plentiful. When we look at the stars and the galaxy which are abundant in nature, we realize the fact that they live in a system with perfect balance hence there will be no occurrence of planets crashing against one another, nor





moving outside their orbits. All this shows the Greatness and Wisdom of Allah in creating and arranging this world in perfection.

Besides this, the elements existing in this world whether it is alive or dead are both dependent on one another in a cause and effect framework and this dependency is varied and harmonious. It is this harmony that brings balance and is the main key to the well-being of the life of all matters in this world. Therefore, it would be impossible for this vast universe and the environment which is home to man on earth to be a safe and conducive place to live in should the balance that is created by Allah be disturbed and ruined.

In this century, we have witnessed the irresponsible actions of mankind which has affected the balance of the environment. These actions have disturbed the balance of the systems in the environment. As a result of this, environmental imbalance has caused many other problems affecting human life. A clear example is the unsustainable development and improper management of the environment which has resulted in the occurrence of flash floods, landslides, air pollution from garbage dumps, the rise of new diseases and many other problems.

If justice is regarded as the roots of a harmonious society, then *ihsan* (to do beautiful things) is its adornment which makes it whole, perfect and more beautiful. If justice can save a society from social ills and evil acts, then *ihsan* makes life more cheerful and orderly.





Your Role

Environmental sustainability can be achieved by doing the following:

1. Use natural resources sustainably.
2. Interact with the environment with fairness and *ihsan*.
3. Avoid causing any damage to the environment.





CHAPTER 4

TIGER CONSERVATION

Rosmidzatul Azila Mat Yamin

Chapter 3 has explained explicitly about the concept of Islam towards nature and all beings inhabiting it. The explanation extends to the discussion on how to rightly interact with other beings on this earth so that there will be no destruction or damage inflicted on these environmental components.

One of the important matters explained in Chapter 3 is the role of humans as Caliphs

to take care of animals' rights to ensure its survival.

Conservation of animal species is vital because since the beginning of life in the universe, these creatures have contributed their services to the environment. However, it is unfortunate that the level of awareness in our society is very poor towards the significance of protecting animals for the well-being of the entire ecosystem.

Tiger Conservation **73**





Nowadays, there is a lack of responsibility in taking care of the environment which encompasses all living things (especially animals) due to the desire for wealth and worldly gains by some reckless individuals. This is evident through frequent news we hear today about illegal hunting activities and smuggling of wildlife components into black markets abroad. This situation persists as if there is no end. Thus, appropriate actions should be taken to overcome this matter.

One of the most effective actions that can be taken is through a religious approach which calls on members of the public to reflect about the creation of the world and the roles imposed on every creature inhabiting it. This is because it is only through the religious approach that we are able to train the human soul and behaviour to observe good manners and ethics towards all creatures in this world. It is hoped that by instilling the awareness about the importance of various animal species on earth, this appreciation can save these creatures (especially the endangered ones) from the brink of extinction.

Malayan Tiger

In this chapter, the main focus of discussion will be on one of the endangered animal species which is the tiger. There remains only one species of tiger, *Panthera tigris* and six more living subspecies that can be found in 13 countries in Asia and Russia. The six sub-species are as follows:



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- i. Bengal Tiger (*Panthera tigris tigris*)
- ii. Amur Tiger (*Panthera tigris altaica*)
- iii. Malayan Tiger (*Panthera tigris jacksoni*)
- iv. Indochinese Tiger (*Panthera tigris corbetti*)
- v. South China Tiger (*Panthera tigris amoyensis*)
- vi. Sumatran Tiger (*Panthera tigris sumatrae*)

Another three sub-species, which are Bali, Javan and Caspian have been extinct since the 20th century. In the 1990's, there were approximately 100,000 wild tigers in forests all over the world. However, it is estimated that currently there are only 3,200 wild tigers worldwide. Out of this amount, India has the largest tiger population with approximately half of the world's tiger population. Meanwhile, Malaysia has the second highest tiger population in the world and is one of the countries with great potential to protect these animals.

The normal life span of a tiger is around 10-15 years. Generally, these animals enjoy

resting during the day and go hunting at night. Their hunting activities are normally solitary (unlike lions that hunt in groups) and they hunt for prey by hiding in between long grass. In Malaysia, the main prey of tigers are wild boars, deer, and antelopes. Even though their prey are becoming more scarce, the probability of tigers attacking humans is rare because humans are not part of a tiger's diet. Instead, tigers only attack humans when they feel threatened or when they are injured which limits their usual ability to hunt for prey.

Today, tiger populations are depleting due to loss of natural habitats as well as hunted down for being regarded as pests, dangerous and threatening to humans and killed to be sold in black markets due to their high value. In the last 50 years, there were 3,000 Malayan tigers recorded in Malaysia but this number is rapidly declining.

Based on estimates by the Department of Wildlife and National Parks (PERHILITAN), there are approximately 500 wild tigers left in Malaysia today which is only 15 percent of the population that existed in the 1950's. This





dwindling amount can be attributed to the various threats faced by tigers.

Threats on Tigers

Destruction of Wild Habitats

The destruction of wild habitats is the major factor causing threats on tigers. Globally, it is discovered that 170,000 km² of forests are destroyed every year. Based on the current scenario, can humans still save forests and wildlife, especially the endangered tigers from becoming extinct? By looking at the situation in our country, forests are being demolished for the purposes of development, housing, agriculture, farming, logging and others, resulting in the shrinking of forested areas. This situation causes the home range for wildlife especially tigers to become smaller which simultaneously results in drastic reduction of wildlife populations.

In this home range, biologists estimate that the number of species in a 10 km² area has double the amount of species than in a 1 km² area. Hence, reducing an ecosystem area

to one tenth of its original size may drive half of the species to extinction. In this situation, the animals on top of the food chain such as tigers need a big home range to feed. In addition, a smaller home range makes preying more difficult. Moreover, when trees are cut down in the name of development, other wildlife species will lose other basic necessities such as water supply and enough inhabitation area for survival. These will pose as bigger challenges to tigers' survivability.

If the situation prolongs, it will contribute to the extinction of wildlife populations that inhabit our forests. Worse still, when a species is wiped out this will inadvertently trigger worse problems because in nature, every species created has its own roles and functions to maintain a well-balanced ecosystem.





Thus, when a species vanishes, this will automatically disrupt the balance and stability of the ecosystem.

Despite numerous warnings and reminders given by Allah, humans are blinded by their greed to the extent that they forsake the significance of an ecosystem just for materialistic gains which will eventually be more detrimental for them. Allah SWT says in His holy Quran:

"What comes to you of good is from Allah, but what comes to you of evil, (O man), is from yourself."
(Surat an-Nisaa', 4:79)

In the context of tigers, this species is also an important component in the ecosystem. The main food for tigers which are wild boars (*Sus scrofa*) breed rapidly and cause damage by digging and eating crops in forests, farms and orchards. With the existence of tigers, they can help to reduce the population



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of wild boars. When the population of wild boars is controlled, damage on crops will be reduced.

The unique web of life is interlinked within our ecosystem in which every component is dependent upon each other to keep nature in balance. Hence, the extinction of a component in this natural link will surely disturb our ecosystem and jeopardise nature's balance as a whole.

Unplanned Development

Unplanned development is one of the factors contributing to the devastation of forests. One such development is uncontrolled or improper and unsystematic land management for development such as opening of new towns, building of highways, dams and others. These unplanned activities can lead to serious fragmentation of forest habitats and this situation negatively impacts wildlife especially tigers.

Back in the 19th century, the coverage of tropical rain forests in Peninsular Malaysia was

almost 90 percent. However, by the year 1957, coverage decreased to 74 percent and most of the lowlands have been converted into agricultural areas. The situation further deteriorated when the coverage of rainforests went down to 61 percent in the 1970's and subsequently to 47 percent in the 1980's. From years 2000 - 2010, the rate of deforestation in our country was estimated at 0.9 percent per year. In parallel to the reduction of forest coverage, the population of wildlife including tigers has also dwindled due to scarce food supply in their shrinking home range area.

Illegal Hunting (Poaching) and Trade

Illegal hunting activities of tigers for trade are among the prime threats that have caused



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the current decline of tiger populations. Illegal hunting of this species is driven by demand for certain tiger body parts which are highly prized such as skin, nails, fangs and others for foreign black markets. This illegal activity is getting rampant because of escalating demand for tigers' parts which are superstitiously believed by certain individuals especially males, to have magical powers that can sustain their health and cure various types of diseases.

Moreover, tigers' internal organs are believed to enhance sexual strength as well as being used as amulets to seduce women and protect the wearers. However, these outlandish beliefs do not hold any scientific bearing. In spite of this, many still believe these superstitious and unscientific claims which further makes the mission of saving tigers more challenging.

Apart from hunting tigers, humans also poach animals consumed by tigers such as wild boars, sambar deer and barking deer. Poaching of these animals worsens the situation because they significantly reduce the



number of tiger preys. Following widespread poaching activities, wildlife are pushed even more to survive as loss of forest habitats reduce the amount of tiger prey. Such circumstances force tigers to leave their home range in search of food.

Conflicts between Wildlife and Human

To continue surviving in shrinking forests and changing home ranges, tigers have been driven to share the same environment with humans. This situation has forced tigers to enter into human settlements and subsequently causing conflicts between tigers and humans.

Wildlife conflict is defined by interaction or action by wildlife species that result in death,





injury, property damage, death of livestock and causing fear among humans. Conflicts normally happen when wildlife are out in search of food and inadvertently encounter humans. These encounters sometimes give rise to tigers attacking and hurting humans when distressed and desperate, attacking wandering livestock and destroying crops. Such circumstances cause fear and hatred in the local communities and tigers are regarded as foes. Consequently, humans resort to reacting by hunting, hurting and killing the wildlife until the situation precipitates into a continuous conflict between humans and wildlife.

Furthermore, when a conflict that causes property damage, injury, and human death takes place, wildlife are always to be blamed and deemed guilty. On the contrary, such conflicts actually happen because of our own actions. So, if we try to react upon what the brute animals do, it shows that humans who have been bestowed with reason are trying to prompt the conflicts or worsen the conflicts with wildlife. Allah SWT says:

“Corruption has appeared throughout the land and sea by (reason of) what the hands of people have earned so He may let them taste part of (the consequence of) what they have done that perhaps they will return (to righteousness).”

(Surat ar-Rum, 30:41)

Based on the verse above, it is clear that all calamities and catastrophes are due to humans' own doing. The same thing occurs in the case of conflicts between tigers and humans; it is caused by human actions that encroach upon and disturb the harmony of wildlife's natural habitats. As a result, these conflicts give rise to the risk of extinction.

Reduction in tiger populations is caused by instances in which tigers that created 'conflict' are caught by authorities and then normally placed in captivity in zoos with the excuse to reduce the conflicts. Other species like elephants will be caught and transferred to a habitat far from human settlements. Nonetheless, the action of moving the elephants to a new habitat is not a wise move.





This is because in the long-term, these animals cannot handle real conflicts. Instead, this action might induce bigger problems such as putting the elephants under pressure to adapt to their new habitat and environment. What is more worrying is that the pressure and distress faced by these animals will result in their death. Therefore, if this situation continues to persist, it will contribute to the extinction of a valuable species in our forest ecosystem - also a great loss to mankind itself.

Wildlife and human conflicts also create adverse effects on human life. When wildlife invades farming areas, they will cause damage to the crops and farmers will experience a loss in income because the crops cannot be sold. Hence, this will affect livelihoods of local communities involved in such conflicts.

Best Management Practices (BMP): An Approach towards Reducing Wildlife Conflicts

The rise in tiger and human conflicts are also attributed to the attitude of farm and orchard owners who neglect to clear their areas of underbrush which resembles the natural habitat

of wildlife. Such settings will attract the animals into the areas because it can provide them a good location to hide before preying. Apart from that, there are certain farm owners who let livestock wander without setting up enclosures. This practice does not pose as a problem if the farm is located far from the forest. However, for farms that are near forests, livestock becomes potential victims for tigers just like many cases recorded in newspapers which occurred in Kelantan and Terengganu.

To lessen the human-wildlife conflicts, an approach known as Best Management Practices (BMP) was implemented. BMP is a practice that can enhance or improve existing conditions. It is one of the initiatives that can prevent the occurrence of human-wildlife conflicts. For instance, by ensuring



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that orchards and plantation areas are well-kept, this effort can increase crop yield and at the same time contribute towards more income. Setting up enclosures to limit the movement of livestock especially at night can reduce the instances of tigers attacking them. Additionally, for owners who have big farms, usage of electrical fence has been proven to reduce the conflicts. Moreover, the application of BMP can also enhance safety while working at the farms or orchards.

Tiger Conservation in Malaysia

The official custodians of tigers and other wildlife in Malaysia is the Department of Wildlife and National Parks (PERHILITAN). PERHILITAN is a department under the Ministry of Natural Resources and Environment that implements the Wildlife Conservation Act 2010 (Act 716) and is responsible to protect tigers and other terrestrial wildlife in Peninsular Malaysia. The responsibility of tiger and other wildlife conservation is also aided by other governmental and non-governmental organisations such as the Forestry Department of Peninsular Malaysia, Malaysian Nature Society (MNS),



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WWF-Malaysia and Wildlife Conservation Society (WCS) Malaysia. Among the conservation efforts that have been carried out in Malaysia to date are as follows:

(i) Anti-poaching programme

This effort is done to reduce poaching activities and wildlife crimes. Among measures taken for this effort are patrolling and confiscation of snares.

(ii) Wildlife monitoring programme

This programme is implemented to assess the effects of human disturbances on tigers





and wildlife such as logging activities and forest openings. Besides that, studies have also been conducted to estimate current tiger populations in Malaysia and to gather more information about tiger ecology and its prey for the purpose of formulating guidelines on habitat management and other related policies.

(iii) Community Engagement and Education programmes

This programme is implemented to increase awareness and knowledge among members of the public and stakeholders about environmental and wildlife conservation to reduce threats towards them.

(iv) Land use and ecological corridor

Studies have been carried out to evaluate the probability of establishing ecological corridors to connect several separated small forests with the main forest areas. In addition, this programme also aims to ensure that land use is done sustainably especially in areas recognised as environmentally sensitive.

(v) Policies (Acts and Regulations)

Suitable laws and policies are enacted to ensure that conservation strategies can be implemented comprehensively and efficiently and can benefit the environment and country in the long run. Among those are the establishment of the National Tiger Conservation Action Plan and the replacement of Protection of Wildlife Act 1972 with the Wildlife Conservation Act 2010 (Act 716), which is a move to ensure better, comprehensive and effective law and enforcement for environmental protection and biodiversity conservation.

Laws Related to Tiger Protection

Malayan tigers are listed as 'Totally protected' animals under the Wildlife Conservation Act 2010 (Act 716). It is also listed as 'Endangered' in the International Union for Conservation of Nature (IUCN) Red List of Threatened Species, a widely recognised organisation for comprehensively evaluating the conservation status of animals and plants species. Other than that, the Convention on International Trade in





Endangered Species of Wild Fauna and Flora (CITES) also lists down the tiger (*Panthera tigris*) in Appendix I, in which it prohibits international trade unless for non-commercial purposes. Appendix I CITES consists of list of animals and plants species threatened with extinction.

Hunting from Islamic Perspective

Since ancient times, humans have sustained their existence by hunting and today, this practice is still enjoyed by many and in several countries, hunting is deemed as an entertaining sport. Thus, Quran and Sunnah view this as a serious matter. *Fiqh* scholars have even discussed about this matter extensively in

their books, stressing on which is *haram* (prohibited) and *halal* (permissible).

Based on the discussions, it is concluded that hunting is only permitted for rightful purposes and is *halal* in Islam.

Islam only allows hunting for food but not for sports, leisure/enjoyment and money. This is because Islam does not allow an animal to be killed, tortured or chased away from their native habitats. During the time of the Prophet (pbuh) there was an incident which showed that the Prophet (pbuh) forbids us from torturing or putting animals in distress.

It is frequently mentioned in Islam about the wisdom of the Prophet (pbuh) in respecting other creatures. As narrated, the Prophet (pbuh) reproached one of his companions in a journey who had caught hatchlings from its nest. When the mother noticed that its hatchlings were lost, it flew above the Prophet's (pbuh) group and followed them. Witnessing the situation, the Prophet said:



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"Who grieved this (bird) for its young ones? Return its young ones to it"

(Hadith narrated by Abu Daud).

Based on the above hadith, it is clearly shown that the Prophet (pbuh) strictly forbids us from mistreating animals. The incident should be a lesson for us to treat animals kindly and to never let them suffer.

On top of that, humans who are bestowed with hearing, sight, heart, and common sense to think and acquire knowledge should make self changes and treat everything in nature with full awareness and sensitivity towards the needs of other creatures to ensure that the world may become a more thriving and safer place for all creatures.

The Quran also justifies that all animals (and all other living things) in the universe are *"umat (community) just like us"* which have been created by God and have the rights to live according to the will of God because He is the one who provides gifts to all living things, as revealed by Allah SWT:

"And there is no creature on (or within) the earth or bird that flies with its wings except (that they are) communities like you."

(Surat al-An'aam, 6: 38)

In the Quran, the word *ummah* is repeated 51 times and the word *umam* (communities) is repeated 13 times. The community represented by *umat* in the al-Quran can be categorised into six groups, which are animals, jinn, *umatas* 'time', *umatas* faith, *umat* that refers to religion, and *umat* as a congregation in a group.

On a different occasion, the Prophet (pbuh) mentioned that an ant had bitten a prophet. Then the prophet asked his people to burn down the ant nest and so the ant together with its colony was brought to flames.





Thus, Allah SWT had revealed to the prophet:

"Because of an ant's bite you have burnt a community from amongst the communities which sings my glory?"

(Hadith narrated by al-Bukhari and Muslim)

Among lessons that could be learnt from the event are:

- (i) Killing ants is prohibited as the prohibition on killing other animals unless the animals cause harm.
- (ii) All animals give praise to Allah SWT.
- (iii) The burning of animals (animals' nests), according to the teachings before the Prophet Muhammad's (pbuh) time, is permitted. Instead, it is prohibited according to the teachings during Prophet Muhammad's (pbuh) time.
- (iv) Someone's sins will not be burdened on other people, based on the revelation

from Allah:

"And no bearer of burdens will bear the burden of another."
(Surat Faatir, 35: 18)

Allah says further:

"And there is no creature on earth but that upon Allah is its provision."
(Surat Hud, 11: 6)

Everything created by Allah is for the benefit of all beings, as Allah SWT says:

"It is He who created for you all of that which is on the earth."
(Surat al-Baqarah, 2: 29)

Hunting Practices in Islam

Equipments used for hunting

The best equipments used for hunting are those that will not inflict injury or abuse on the hunted animals. For instance, the use of cages to catch animals can prevent injury on the animals, unlike the use of noose or snares that may cause injury. Animals injured by





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snare will have limited capability to hunt. This is deemed as a form of abuse towards those animals.

This will entail difficulties for the animals and reduce their ability to chase and hunt prey for food, for themselves and their offspring. As a consequence, injuries from snares set up by humans will cause the animals to starve to death. Whereas Islam strictly forbids the *umat* from torturing other creatures because they also share the same rights as humans.

With regards to the relationship between humans and animals, Islam strongly calls on humans to treat animals well. Moreover, every good deed comes with great rewards as

promised by Allah SWT. It has been mentioned by the Prophet Muhammad (pbuh):

"They (Apostle's companions) said, "Messenger of Allah, do we have a reward for taking care of beasts? He said, There is a reward for service to every living creature."

(Hadith narrated by Imam Malik, Muwatta)

Meanwhile, the Prophet (pbuh) also strictly prohibited tying up animals or using them as targets and if they are to be killed, they deserve a decent and humane way of killing as mentioned by the Prophet (pbuh):

"Verily Allah has enjoined goodness to everything; so when you kill, kill in a good way and when you slaughter, slaughter in a good way. So every one of you should sharpen his knife, and let the slaughtered animal die comfortably."

(Hadith narrated by Muslim)

Based on the hadith, it is clearly explained that we are encouraged to be considerate in



every action that we do, especially in terms of our relationship with other creatures. This matter is highly stressed upon in Islamic laws to prevent the torture of hunted animals. Islam also emphasises that the hunting of an animal is prohibited if it is carried out without any sheer purpose.

Instead, hunting outlined by Islam is the type that can provide us benefits. Hunting on the basis of pleasure or to fulfill futile desires is strictly forbidden. The Prophet (pbuh) once said:

"If someone kills a sparrow for sport, the sparrow will cry out on the Day of Judgement, O Lord! That person killed me in vain!"

He did not kill me for any useful purpose."

(Hadith narrated by Nasa'i and Hakim)

Unfortunately, wildlife hunting activities are still occurring today and worse still, is carried out for futile purposes. For example, elephants, Sumatran rhinoceros and tigers are hunted for certain body parts which are assumed to enhance sexual performance and to protect the wearer. These are superstitious beliefs whereas Allah precisely forbids His servants from believing in superstition.

Overhunting

Overhunting that results in negative impacts towards the ecosystem and causes the extinction of wildlife which subsequently affects the welfare of humans is strictly forbidden. On the other hand, we are asked to be moderate in every aspect of life including utilising the pleasures given by Allah SWT. Besides that, we are also urged to take care of and sustain forest-based natural resources and its elements properly and wisely. We are also



forbidden from becoming greedy and from exploiting our resources. This matter has been mentioned clearly in a verse:

"...and be not excessive. Indeed, He does not like those who commit excess."

(Surat al-An'aam, 6: 141)

In another verse revealed by Allah SWT:

"...and do not spend wastefully. Indeed, the wasteful are brothers of the devils, and ever has Satan been to his Lord ungrateful."

(Surat al-Israa', 17: 26-27)

Wildlife Trade from Islamic Perspective

As Muslims, we are forbidden from gaining profits from businesses that are based on *haram* (prohibited) sources. This is when Allah SWT has made something unlawful, thus He also has decreed that reaping profit from an unlawful source is also prohibited. For example is the earnings obtained from the trade of inedible sources (*haram*) such as cadavers, pigs, amphibians, carnivores, and animals

that use nails, claws and fangs to hunt. There is a hadith narrated by Abu Tsa'labah from the Prophet (pbuh) mentioning about this:

"Allah's Apostle forbade the eating of the meat of beasts having fang."

(Hadith narrated by Muslim)

There is also another hadith narrated by Abu Hurairah that has similar meaning:

"The eating of all fanged beasts of prey is unlawful."

(Hadith narrated by Muslim)

Both hadiths explain that it is forbidden to eat flesh of beasts having fangs. The word 'beasts' mentioned in the hadiths actually



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refers to carnivores. Among the animals that fall in the group are tigers, lions, wolves, dogs, snakes, bears, foxes and other animals similar to what has been mentioned earlier.

Therefore, whoever sells the above mentioned animals for eating which are clearly *haram*, hence also obtains forbidden income. In Islam, there has never been determination on *zakat* for *haram* income. Thus, the person will also generate *haram* earnings from not paying *zakat*. In short, the hadiths clearly

substantiate the illegality of trading animals like snakes and beasts that are *haram* to be eaten because it does not provide any religious benefits. However, if the skin of certain animals can be tanned and processed for clothing, shoes and others uses, it is then permissible to be traded. Nevertheless, today there are many alternatives like thread, rubber and others for similar purposes, so we need not depend on animal skins to manufacture such products. What more if the skin used is from animals that are facing extinction



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because of the detrimental effects caused to the ecosystem outnumber benefits gained. Therefore, this matter requires serious attention because the well-being of the ecosystem is far more important than human needs that can still be fulfilled using other alternatives. In addition, the use of certain animal parts to produce illegal objects in Islam is also prohibited from being traded. The Prophet (pbuh) once said:

“When Allah declared eating of thing forbidden for the people, He declares its price also forbidden for them.”

(Hadith narrated by Abu Daud)

Based on the hadith from the Prophet (pbuh), the price obtained from selling inedible (*haram*) sources is also *haram* in Islam. The selling of certain wildlife parts for superstitious purposes is also disallowed because superstition is strongly prohibited in Islam and income originating from such sources is definitely *haram* as well.

Conclusion

There are no solutions considered as the 'best' that can be easily applied to overcome the current decline of tiger populations. What is important is to emphasise on the conservation of forest habitats and to prevent conflicts that are likely to happen between humans and tigers.

Therefore, all development plans including land openings for the purpose of plantation is best not to be done in areas that are potential wildlife habitats, what more within areas that have dense wildlife population. If such areas are encroached and developed, it will worsen the situation. It is not only hard to abate conflicts when this happens, all the more so that it will persist for a long time. Even though human-wildlife conflicts cannot be stopped immediately, it is hoped that with the cooperation and awareness among the communities about the need for forest conservation, the conflicts can at least be reduced.





In addition, every development plan must not neglect the beauty and significance of the environment and the ecosystem. Our majestic environment is a great gift bestowed by Allah SWT for humans to enjoy but not to be exploited irresponsibly. Thus, humans must be aware of their roles as caliphs on the earth entrusted to take care of the environment and all beings living inside.

Moreover, we are also commanded to equip ourselves with knowledge, faith, devotion, skills and new experiences so that we may understand better the nature of God's

creations and all living components that encompass this world. Through proper understanding, it is hoped that we are empowered to change our ways and to solve environmental problems in order to enjoy nature's bounties for many years to come. Allah SWT says:

"That is because Allah would not change a favour which He had bestowed upon a people until they change what is within themselves. And indeed, Allah is Hearing and Knowing."

(Surat al-Anfaal, 8: 53)

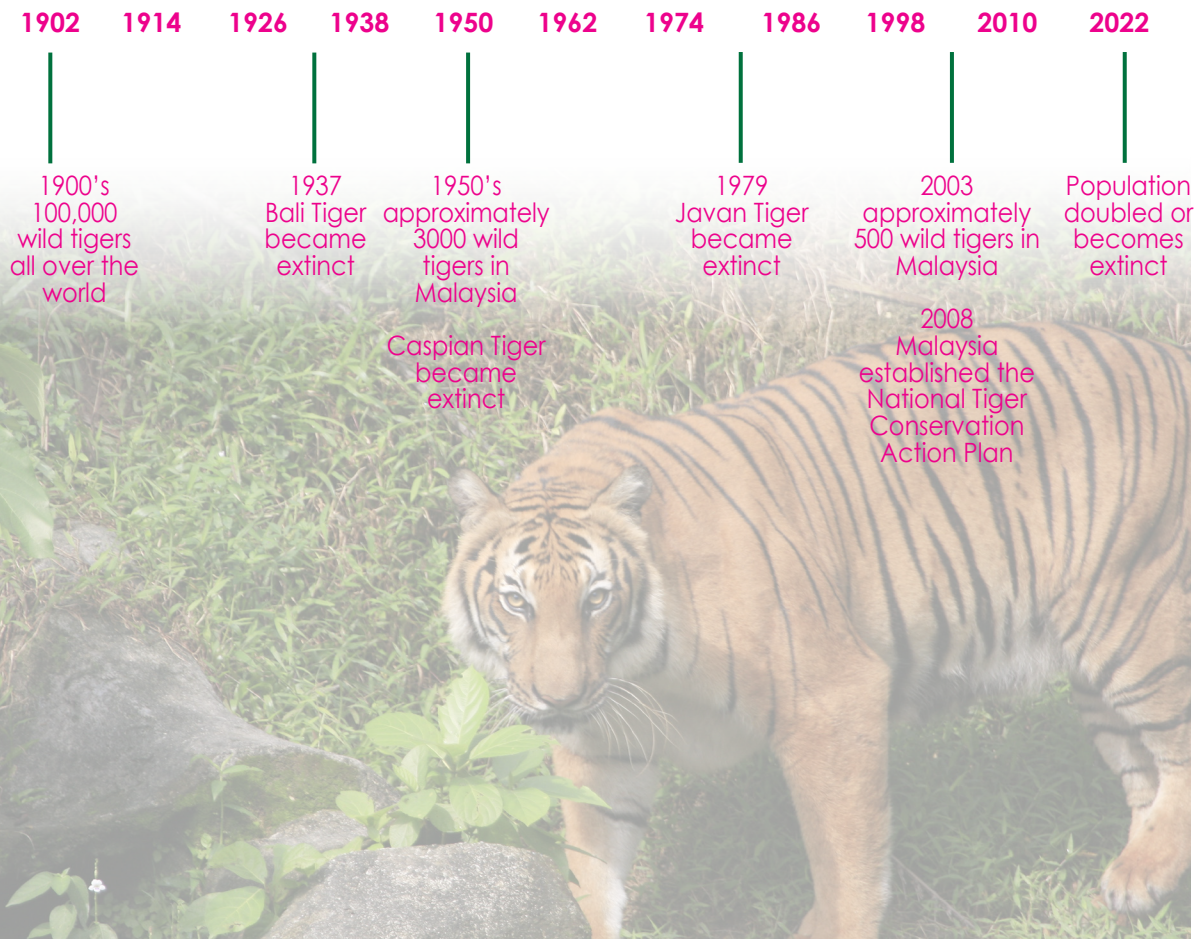
Your Role

1. To report any suspected crimes involving tigers and protected wildlife to the authorities.
2. To learn about tigers and wildlife from reliable sources and spread the knowledge to friends and families.
3. To voice out your opinions about matters related to widespread development, logging and illegal hunting.
4. To boycott products made from wildlife parts.
5. To support organizations carrying out wildlife conservation efforts.





Cronology of Tiger



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Information

MYCAT

What is MYCAT?

MYCAT is an alliance of the Malaysian Nature Society, TRAFFIC Southeast Asia, Wildlife Conservation Society-Malaysia Programme and WWF-Malaysia for joint implementation of the National Tiger Conservation Action Plan for Malaysia.

Role of MYCAT:

- i. Facilitate communication between the partners.
- ii. Coordinate collaborative efforts and manage joint projects.
- iii. Assist the Ministry of Natural Resources and Environment in monitoring the implementation of the National Tiger Conservation Action Plan.
- iv. Consolidate information from the partners to disseminate to the public.
- v. To provide technical support based on requests, especially for MYCAT partners and governmental agencies.





CHAPTER 5

SEA TURTLE CONSERVATION

Rosmidzatul Azila Mat Yamin

Every single species, whether on land or in the ocean, has been created to complement each other and live in harmony within their respective ecosystem. They have their own roles (according to the decree of Allah SWT) which are vital to the ecological cycle and our natural environment. This has been clearly mentioned in the words of Allah SWT:

"He arranges [each] matter from the heaven to the earth..."

(Surat as-Sajadah, 32: 5)

In this chapter, the discussion focuses on a marine species that is of no less importance to the marine ecosystem than any other: the sea turtle, which is now threatened by extinction. Besides their importance in helping to balance and stabilise the marine ecosystem, turtles are also among the most physically unique and fascinating of marine species.

The equilibrium between marine ecosystems and the species living in them is subject to the laws of Allah, The All-Knowing (*Al-'Alim*), The Watchful One (*Ar-Raqib*), and The Protector (*Al-Hafiz*), as mentioned:

Sea Turtle Conservation **95**





"...And Allah is Knowing of what you do.

(Surat al-Baqarah, 2: 283)

"...And ever is Allah, over all things, an Observe."

(Surat al-Ahzab, 33: 52)

"...Indeed my Lord is, over all things, Guardian."

(Surat Hud, 11: 57)

Sea Turtles (*Sulahfaat*)

The unique anatomy of the hard-shelled sea turtle, with its two pairs of flippers, makes it a very agile swimmer. Turtles are classified as vertebrates in the Reptile class. Characteristics of this species include having scaly skin (on the shoulders, which is not covered by the carapace), breathing through the lungs, laying eggs, and having a body temperature that is the same as the ambient temperature.

Seven species of sea turtles have been recorded worldwide. Of these, four species are known to land on the shores of Malaysia, namely the Leatherback Turtle, the Green

Turtle, the Hawksbill Turtle and the Olive Ridley Turtle.

Roles and Importance of Turtles in the Ecosystem

Every single creation of Allah SWT on this earth has a specific role and function. They mutually interact with each other and are interconnected. This has been stated clearly in the Quran through His words:

"Indeed, all things We created with predestination."

(Surat al-Qamar, 54:49)

"...And everything with Him is by due measure."

(Surat ar-Ra'ad, 13: 8)

The same goes for turtles. They play a substantially important role in the marine ecosystem. Some of these roles are:

Table 1: Turtle Population recorded in Malaysia in the last 20 years

Leatherback Turtle (<i>Dermochelys coriacea</i>)	Green Turtle (<i>Chelonia mydas</i>)
 <p>Status: Critically Endangered (IUCN Red List) Rate of Decline: 99%</p>	 <p>Status: Endangered (IUCN Red List) Rate of Decline: exceeding 60%</p>
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)
 <p>Status: Critically Endangered (IUCN Red List) Rate of Decline: 60%</p>	 <p>Status: Vulnerable (IUCN Red List) Rate of Decline: 95%</p>

(Source: Department of Fisheries Malaysia)



Acts as an Indicator Species in the Ecosystem

An indicator species refers to a species that is able to show signs of change as a result of alterations in environmental conditions, whether in biotic or abiotic systems. The indicator species demonstrates these signs of environmental change via their distribution, abundance and demographic characteristics (including population, sex and age structure), which indicate the presence of threats to the ecosystem.

An Integral Part of the Marine Ecosystems

The various elements in the marine ecosystems are interwoven with each other and are inseparable. If the links between them are disconnected, there will be a devastating consequence to the marine life. For example, there are some turtle species that feed on sea grass and there are others that feed on starfish and jellyfish. Turtles that graze on seaweed (such as green turtles) help spruce up the sea grass population. This will allow more sunlight to reach the seabed, which then

helps sea grasses to be more fertile and grow more healthy. Sea grasses that are healthy and grow abundantly will release oxygen and absorb carbon dioxide as a result of photosynthesis.

In turn, the released oxygen will replenish the oxygen content in seawater that is



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essential for ensuring the survival of other marine species such as fish and crabs. In addition, faeces excreted by the turtles will spread around the turtles' habitat and will become fertiliser, helping the sea grasses to proliferate. This example clearly shows us how the existence of turtles fits in perfectly in the marine ecosystem and contributing to continuous functioning of the ecosystem processes and cycles.

Acts as a Symbiotic Animal in the Marine Ecosystem

When turtles eat sea grass, they will spit bits of sea grass that have been chewed on and these will subsequently be eaten by fish and other marine species. This phenomenon clearly depicts that there is a symbiotic relationship and inter connectedness between turtles and other marine species, which complements the functions and processes that occur in a marine ecosystem.

Helps Stabilise Predator and Prey Populations in an Area

Turtles are also predators of certain species and thereby they help balance the population of their prey in the particular area they inhabit. For example, if a turtle species that preys on starfish and jellyfish disappears this can cause a serious consequence to the marine ecosystem. As a result, there will be some areas that become fully occupied just by jellyfish due to disruption in the food web within the ecosystem while some areas of coral reefs are destroyed because of invasion by starfish once their natural predators are no longer present in the area.



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If the turtle species that eats jellyfish goes extinct, then the jellyfish will breed in large quantities and will voraciously eat other marine life, particularly fish. When this happens, the growth and reproduction of fish populations in the future will be inhibited. As a result, the number of fish will decrease, and more worryingly, it can lead to the extinction of fish.

For turtles that forage on red algae, should they become extinct, the red algae will multiply profusely and eventually choke the coral reef ecosystem. With the reef ecosystem destroyed, the fish population that depends on the coral reefs as their habitat will also perish.

When considering the role and importance of turtles, as the only creation of Allah



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SWT blessed with common sense, we should realise that even if it is merely a turtle, its extinction will have a huge impact on our food chain. If the turtle goes extinct in a certain area, the food chain in the area too will become imbalanced, and this will lead to the extinction of fish populations that are our main source of protein.

Although the roles of turtles may seem minuscule, their extinction will gravely and seriously affect the single top most predator on this earth, that is, human.

Threats of Extinction for Turtles

Turtles today are among the most endangered marine species and are experiencing



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serious population declines, particularly the Leatherbacks. In fact, according to a report issued by the Rantau Abang Turtle Sanctuary in Terengganu, their records showed that in the 1950's, there were more than 10,000 turtle nests on the beaches around Rantau Abang.

However, the latest statistics reveal that less than 10 nests are recorded each year in recent years. If no measures are taken to curb the decline, it could lead to the extinction of Leatherback turtles as well as other turtle species that still land on our shores today.

Threats to turtles are divided into two: natural threats such as coastal erosion, predation in the open sea, climate change; and threats from human activities. However, destruction caused by human activities has the most significant impact on the turtle populations' decline compared to natural threats. In fact, due to these threats, it is estimated that 10,000 hatchlings are needed in order to get a single mature mother turtle aged 20 to 30 years old.

Threats from Human Activities

Coastal Zone Development

The construction of hotels, residential areas, parking lots, and coastal erosion prevention structures along the coasts indirectly threaten turtle nesting areas. This is due to obstruction, light and noise which scare and prevent turtles from landing to lay eggs.

The increasing presence of visitors near turtle nesting sites will also increase the disturbances to nesting turtles, like torchlight glare, bonfires on the beach, camera flash lights, jet skiing, motor vehicles on the beach, and acts of vandalism such as throwing rocks, bottles and branches at turtles. In fact, other activities such as sand mining and felling of trees on the beach can also reduce the area for turtle nesting.

Uncontrolled Tourist Activities

Uncontrolled tourist activities like lighting bonfires, singing loudly, littering indiscriminately, disturbing nesting turtles, shining with torchlight and taking pictures with flash are the



various forms of harassments faced by nesting turtles. The practice of collecting turtle eggs for sale and catching turtle hatchlings to be preserved as tourist souvenirs are also threatening turtles to extinction.

Artificial Light Sources

Newly hatched turtles will move towards the water's edge guided by light. During both day and night time, the sky above the sea is brighter than the sky on the ground. The presence of artificial lights at night can confuse and disorientate the hatchlings. This makes them exhausted and vulnerable to be preyed upon when daylight emerges. Therefore, it is important not to shine any lights toward the beach during turtle nesting season to prevent such situation from happening.

Trawling

The use of drift nets and trawl nets by fishermen has also resulted in many turtles drowning when caught in the nets. This happens because turtles cannot breathe in the water and need to rise to the surface to breathe.

However, nets with safety devices that allow turtles to free themselves when caught are now available. Be that as it may, the use of these safety nets is still not widespread. In countries other than Malaysia, there are fishermen who catch turtles for their meat and skeleton, and these are among the threats faced by green turtles, for example.



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Pollution

Marine pollution due to oil spills will cause marine life, including turtles, to be covered





with oil, which can kill them. As a matter of fact, even traces of spilled oil will eventually form tar balls which can be eaten by turtles, resulting in their deaths. Even worse, there are those who are irresponsible amongst us who throw plastic bags and Styrofoam into the sea which pose a great threat to turtles and their hatchlings when they try to consume these things but instead end up getting blockages in their mouth, respiration system and stomach. This situation would ultimately lead to death from hunger, as the turtles are not able to digest any food. In addition to that, there are also the dumping of toxic wastes, heavy metals, and radioactive materials at sea by irresponsible parties, causing severe marine pollution. It also contributes to the decline and deterioration of turtle populations.

Capturing of Turtles for Exotic Cuisine and Traditional Medicine

Foreign fishing vessels that catch turtles in the waters of our country to be used for preparing exotic dishes are also a threat to turtle populations. For instance, the detention of foreign fishermen from Hainan, China in March 2007

for invading Malaysian waters in the state of Sabah to catch turtles proved that these animals are not spared from being hunted to be served as popular exotic dishes.

According to reports made during the arrest, green turtles and hawksbill turtles are among the species being hunted to be served as exotic food. It was discovered that the turtles' entrails are removed prior to preservation using formalin. They are then brought back to Hainan to be marketed as exotic seafood and traditional medicine. If this goes on unchecked, it will pose an even greater threat to the survival of turtles. If the hunting of turtles for this purpose continues, the survival of turtles will certainly be at stake.

Widespread Turtle Egg Harvesting and Selling

The harvesting and sale of turtle eggs are still rampant and this contributes to the extinction of turtles. The inclination of some communities in consuming turtle eggs renders difficulty in halting the harvesting and selling of turtle eggs. For example, the sale and purchase of turtle eggs at the Pasar Payang, a market in





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Terengganu still occur despite various campaigns carried out to discourage this practice.

From the threats described above, it is clear that there are enormous challenges we have to tackle in conserving turtles. In fact, consistent effort is required to overcome the threats faced by turtles. Only when all of us start to care and be concerned about these issues, can we then prevent turtles from becoming extinct. Imagine what a pity it would be if sea turtles which have lived for millions of years, had to deal with continuous and unrelenting threats as a result of our apathy in continuing to carry on irresponsible activities that could threaten its survival on this earth.

Therefore, it is time for us to learn more about turtles so that we can better understand their importance not only to the overall ecosystem, but also to humankind as a whole. Important principles regarding the relationship between man and nature along with its inhabitants have been mentioned a lot in the Quran. Therefore, these principles should be used to guide us in observing the limits of our interaction with the natural environment and all things inhabiting it. When we have clearly understood the principles as well as the relationship between the creations of Allah SWT on this earth, we would be more appreciative of each component of nature which He has awarded us.



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Law and Enforcement for the Protection and Management of Turtles in Malaysia

To address the problem of turtle population extinction in Malaysia, most states have their own respective regulations or enactments in exercising authority on turtle-related matters.

The regulations or enactments relating to the protection and management of turtles for each state are shown in Table 2. Any offences committed under the Acts and Enactments concerning the protection and management of turtles in Malaysia will be subjected to a fine or imprisonment or both.

Table 2: Rules or enactments relating to turtles in each state

State/Federal	Constitution
Federal	Fisheries Act 1985 (Amendment 1993)
Terengganu	Turtle Enactment 1951 (Amendment 1989)
Kelantan	Fisheries Regulations (Turtles and Turtle Eggs) 1978
Pahang	Fisheries Enactment 1937 Fisheries Rules (Turtles and Turtle Eggs) 1996
Johor	Fisheries Rules (Turtles and Turtle Eggs) 1984
Melaka	Fisheries Rules (Turtles and Turtle Eggs) 1989
Negeri Sembilan	Fisheries Rules (Turtles and Turtle Eggs) 1976
Perak	Fisheries Rules (Turtles and Turtle Eggs) 1998
Kedah	Turtle Enactment 1972 Turtle Rules 1975
Pulau Pinang	Fisheries Rules (Turtles and Turtle Eggs) 1999
Sabah	Wildlife Ordinance 1997 Wildlife Regulations 1998
Sarawak	Wildlife Protection Ordinance 1990 Turtle Trust Ordinance 1957





Important Principles of the Relationship between Man and Nature

There are a few important principles outlined by Islam regarding the relationship between man and nature as well as its inhabitants. Among them are as follows:

- i. Allah SWT did not create anything in vain. Each of Allah's creation is a proof of His greatness and is a sign of His power, as has been mentioned:

"And We did not create the heaven and earth and that between them in play. Had We intended to take a diversion, We could have taken it from [what is] with Us - if [indeed] We were to do so."

(Surat al-Anbiyaa', 21: 16)



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"And He has subjected for you the night and day and the sun and moon, and the stars are subjected by His command. Indeed in that are signs for a people who reason. And [He has subjected] whatever He multiplied for you on the earth of varying colors. Indeed in that is a sign for a people who remember."

(Surat an-Nahl, 16:12-13)

"To Allah belongs the dominion of the heavens and the earth and whatever is within them. And He is over all things competent."

(Surat al-Maidah, 5: 120)

- ii. Man is part of the world created by Allah SWT and has a close relationship with his



environment. Man has also been appointed as caliphs on earth, responsible for managing it and all its components as best as they could. Allah reminds us in the Holy Quran:

"And [mention, O Muhammad], when your Lord said to the angels, "Indeed, I will make upon the earth a successive authority." They said, "Will You place upon it one who causes corruption therein and sheds blood, while we declare Your praise and sanctify You?" Allah said, "Indeed, I know

that which you do not know."
(Surat al-Baqarah, 2: 30)

"...He has produced you from the earth and settled you in it..."
(Surat Hud, 11: 61)

- iii. The concept of justice in Islam encompasses all beings on earth, be it animals, plants or others.

"And there is no creature on [or within] the earth or bird that flies with its wings except [that they are] communities like you. We

Fact File

WWF-Malaysia's Survey

In a survey conducted in 2007, it was found that the demand for turtle eggs exceeded the supply. According to the 12 turtle egg vendors interviewed in Kuala Terengganu, the amount of eggs sold in 2007 was between 2,400 and 36,000. This equated to an average of 15,000 eggs sold each year. In smaller markets outside Kuala Terengganu, the estimated average number of eggs sold per year was 11,000. Based on this estimate, a total of 422,000 eggs were traded throughout Terengganu in the year 2007.

(Survey of marine turtle egg consumption and trade in Malaysia, Traffic SEAsia for WWF-Malaysia March 2009, revised December 2009)





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have not neglected in the Register a thing. Then unto their Lord they will be gathered."

(Surat al-An'aam, 6: 38)

- iv. Man has no right to exploit natural resources indiscriminately because everything belongs to Allah SWT. Every creation of Allah SWT has equal standing with man. Allah SWT says in the Holy Quran:

"To Him belongs what is in the heavens and what is on the earth. And indeed, Allah is the Free of need, the Praiseworthy."

(Surat al-Hajj, 22: 64)

"Do you not see that Allah is exalted by whomever is within the heavens and the earth and [by] the birds with wings spread [in flight]? Each [of them] has known his [means of] prayer and exalting [Him], and Allah is Knowing of what they do."

(Surat an-Nur, 24: 41)

Emphasis on the concept of worship in Islam is not only limited to specific worship such as prayer (*solah*), fasting (*saum*), charity (*zakat*) and pilgrimage (*hajj*) alone. On the other hand, it also includes all acts that will benefit people, the environment, and all the inhabitants in it. In fact, abstaining from the prohibitions of Allah SWT is also recognised as an act that grants rewards to Muslims. In the Quran, Allah SWT strictly forbids man from causing destruction on the face of the earth:

"...Do not cause corruption on the earth..."

(Surat al-Baqarah, 2: 11)



"...and do not commit abuse on earth, spreading corruption."

(Surat ash-Shu'ara', 26: 183)

Our Role in Rescuing and Protecting Turtles

Islamic perspective on nature and all living things in it is based on the Quran and Sunnah. Islam teaches that the universe and all things within it interact with each other in harmony. Thus, man has no right to violate or exploit them. This perspective that is based on the tawhidic teachings describe the roles of man on this earth.

Compared to other creatures on this earth, man is the best of Allah's creations. But, despite this, it does not mean that man can treat other creatures indiscriminately; particularly animals. In fact, man is urged to be fair and compassionate, and to protect and preserve the well-being of other creatures who share life on this earth. The Quran informs us that the animals created by Allah SWT provide specific benefits, as stated in the following verse:

"And [He created] the horses, mules and donkeys for you to ride and [as] adornment. And He creates that which you do not know."

(Surat an-Nahl, 16: 8)

There is no doubt that today man has explored and achieved success in various fields of study, particularly science and technology. However, man still does not clearly understand the animals they share this earth with. Islam teaches us that science and technology should not be used vaingloriously. For example, the development of fishing gear (to increase fish catch) should not be to the extent that it also threatens the existence of other species such as turtles, manta rays and so on. Instead, Islam teaches us to be thankful for the blessings that have been bestowed to us by Allah SWT by knowing the limits and not transgressing in any particular endeavour. This has been touched upon in the Quran:

"And it is He who subjected the sea for you to eat from it tender meat and to extract from it ornaments which you wear. And you see the ships plowing through it, and [He



subjected it] that you may seek of His bounty; and perhaps you will be grateful."

(Surat an-Nahl, 16: 14)

In other surats, Allah SWT says:

"Do you not see that Allah has subjected to you whatever is on the earth and the ships which

run through the sea by His command?"

(Surat al-Hajj, 22: 65)

"And cause not corruption upon the earth after its reformation..."

(Surat al-A'raaf, 7:56)

The above verses clearly illustrate that Allah SWT created all things on this earth with a role and purpose. Not the least of which are turtles, which benefit marine ecosystems. Therefore, each of us must play our due roles to save and ensure the continued existence of this species. Among the actions we can carry out are:

Fact File

WWF-Malaysia conduct awareness programmes on turtle conservation in Terengganu and Malacca for local community. For example, there are two community groups in Terengganu: Ma'Daerah Community Heritage Association (Persatuan Khazanah Rakyat Ma'Daerah, MEKAR) and Setiu Womens' Association (Persatuan Wanita Kampung Mangkok Setiu, PEWANIS), both of which have been actively spreading the message of the importance of turtle conservation since 2006 and 2010 respectively.

Stop Consuming Turtle Eggs

Every member of the community should be aware that the culture of consuming turtle eggs causes the turtle populations to decrease, simply because of the reduction in the number of eggs being incubated and hatched. So, in order to stop the sale of turtle eggs, their purchase needs to be stopped too. It is time that people be made aware that the practice of consuming turtle eggs



can affect their health negatively.

The results of a study by a group of researchers from the U.S.A. in 2006 showed that the practice of consuming turtle eggs is harmful to health. They also found that turtle eggs and meat are unsafe for consume because they contain heavy metals, organochlorine compounds, and the presence of the *bacteria Escherichia coli (E. coli)* and *Salmonella*.

The culture and practice of eating turtle eggs is said to be detrimental to health and causes neurotoxicity, kidney disease, and liver cancer, and affects the development of foetus and children. In addition, other effects on health due to the consumption of turtle eggs and meat have also been reported. Among them are diarrhoea, vomiting and extreme dehydration, which can sometimes lead to worse consequences such as death.

Islam forbids us from eating things that can harm our health. By stopping the practice of consuming turtle eggs, not only will we be able to conserve the turtle species because by doing so, we will also be able to get

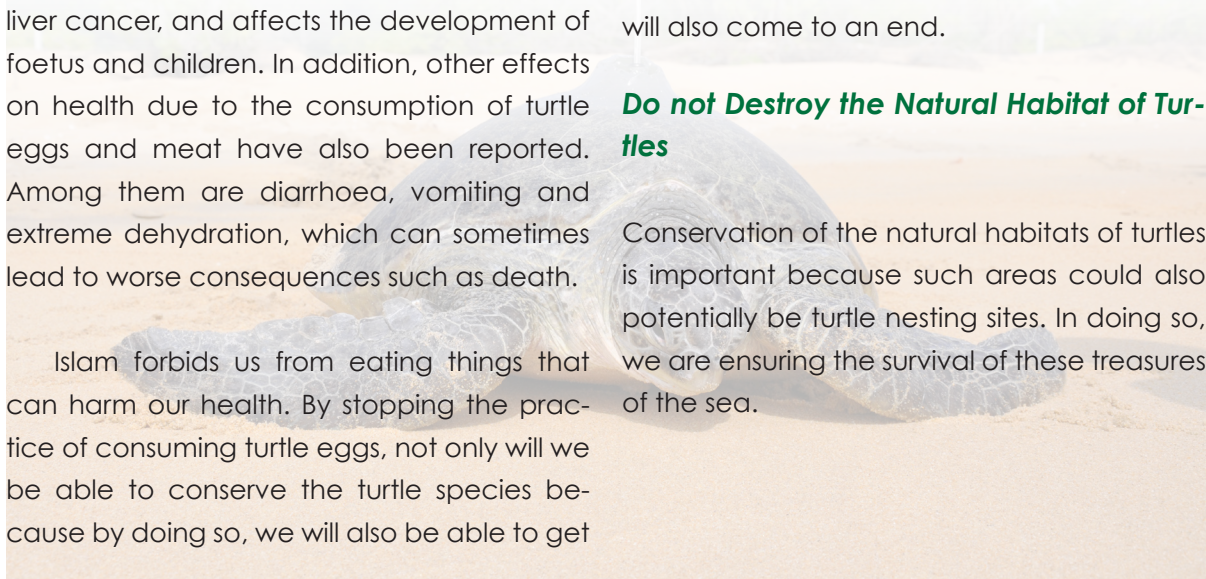
rid of our unhealthy eating habits which can harm us. Educational programmes should be organised from time to time so that public awareness on this matter can be increased.

Stop Killing Turtles for Business and Commercial Purposes

Such activities can only be stopped if we cease buying jewellerys and souvenirs made from the body parts of turtles, such as their shells. When there is no demand for jewellerys or souvenirs made of these animals, then hunting and killing of turtles for that purpose will also come to an end.

Do not Destroy the Natural Habitat of Turtles

Conservation of the natural habitats of turtles is important because such areas could also potentially be turtle nesting sites. In doing so, we are ensuring the survival of these treasures of the sea.





Prevent Oil Spills in National Waters

The onus is on ships that carry oil to prevent oil spills at sea. This is because oil spills will pollute the sea that is very harmful to marine life, including turtles.

Stop Littering and Reduce Usage of Plastic Bags

The habit of littering indiscriminately should be stopped immediately, because if left unchecked, it will affect the entire marine ecosystem and threaten turtle populations. Adopt the use of bags and reusable containers when shopping.

Stop the Use of Fishing Equipments that Can Trap and Kill Turtles Accidentally

Usage of the banned gill nets is one of the causes of turtle mortality. Turtles caught in gill nets will drown because of its big mesh size that exceeds 25.4 cm (10 inches). Its use is disallowed under the Fisheries Regulations (Prohibition of Fishing Methods) 1980.

Conclusion

Conservation and management efforts of endangered species such as turtles are necessary in order to overcome the threat of extinction and maintain existing turtle population numbers.

The causes and problems of this issue have already been identified, but practices that contribute to turtle extinction still persist. This clearly shows us that the aspect of enforcement is still weak and should be strengthened, so that any activities which could lead to their extinction can be prevented. It is high time for the relevant authorities to be more assertive by dealing with the root issues problem.



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In ensuring the success of conservation efforts, cooperation from all members of the community is necessary particularly in creating a healthy interaction with the environment and the inhabitants that occupy it, so that the survival of endangered species such as turtles can be maintained.

In addition, an important aspect that we cannot ignore in trying to save the turtle population is our role as individuals in helping

to address the threats and challenges of conserving this species. If we perform the role and responsibility as caliphs on the earth as entrusted to us by Allah SWT as best as possible, then undoubtedly, we will be able to save the turtle species that are still extant today.

Your Roles

- i. **Stop buying and consuming turtle eggs.**
- ii. **Do not disturb nesting turtles.**
- iii. **Do not buy products made from the body parts of a turtle.**
- iv. **Do not litter indiscriminately.**
- v. **Voice out objections to uncontrolled development in coastal areas.**
- vi. **Spread information about turtle conservation.**
- vii. **Support turtle conservation activities.**
- viii. **Report suspicious activities to the Department of Fisheries.**







CHAPTER 6

CONCLUSION

The decline in today's environmental quality and its living components is a direct reflection of our negligence in realising our roles and responsibilities to govern the earth to the best of our ability. The environmental crisis and the threat of extinction of the flora and fauna are not something new. In fact, it has long been the subject of debate and has continued to present day, with no indication of an end.

The question is, do we only want to be a spectator as the crisis unfolds? Or perhaps, to only depend on others to act?





It is deplorable indeed if this is the attitude that is inculcated within us. As a creation bestowed with mind and reason, responsibility in the stewardship of the environment should be inherent in us especially since we are dependent on it to thrive on this earth. We have also been gifted with the Holy Quran and the prophetic tradition (Sunnah of the Prophet Muhammad; peace and blessings be upon him). These are sources of divine guidance for us to apply in solving the environmental issues that have arisen in order for us to lead a blessed life.

It is time that we learn the lesson from what has befallen our environment especially the degradation (and to a certain extent, the threat of extinction) of the various ecosystems and the species that are within it, whether on land or in the sea. In the previous chapters, we have discussed the life and threats that are facing both the tigers and the marine turtles. It is hoped that after reading this book, you will be exposed to these two species and understand their importance in the ecosystems that they live in.

It is also hoped that with the information that were presented earlier on the importance of these species, we can become more aware and appreciative of our environment and all the species that inhabit it. It is only then can we start realizing the need for nature conservation and the biodiversity within it.

Apart from that, everyone of us needs to become a smart consumer so that we are able to form a healthy interaction not only with our environment, but with all living beings. By cultivating an optimistic view towards environmental conservation and sustainability, it is hoped that we can live in harmony so that it can be passed to later generations.

The blessings of nature, the diversity of life in it and the interdependence of all beings on earth are priceless gifts from Allah SWT. Thus, it is incumbent upon us to manage and ensure that its sustainability is maintained. May this little effort continue, exploring and expanding the discussion in a more elaborate manner and beyond just the two species mentioned previously.





It is hoped that we may be able to save other endangered species if steps are taken now. The future of the environment and its diverse lives lie in our hands. The well-being of the environment and the quality of our future depend on the choices we make in our lives especially with wise and healthy management practices.







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Glossary

1. **Ecosystem** – a system that involves the interaction of a community (e.g. animals, plants, etc.) with its natural environment
2. **Ecology** – a study of the relationship between a living organism and its environment
3. **Evolution** – development/changes in an animal or plant from one generation to another
4. **Environmentalism** – various actions and policies to protect the natural environment, or to revive and expand the role of nature in the environment
5. ***Homo sapiens*** – scientific name for modern human
6. **Food cycle** – an interconnected food chain in an ecosystem
7. **Ecological corridor** – a path that connects one habitat to another in certain ecology
8. **Ecologically friendly** – not harming or affecting the ecological quality
9. **Normative** – the standard basic rules
10. **Superficial** – not in-depth; trivial
11. **Taxonomy** – a study about the principles, rules and practices in classifying living organisms







Index

E

Ecology, 3
 Islamic ecology, 3
 concept, 4
 Western ecology, 3
 features, 3
Ecosystem, 1, 92
Environment, vii, xiii, 1, 6-19, 39-54, 63-72, 115,
 See nature
 balance, 69-71
 conservation, 7
 crisis, 115
 destruction, 63-69
 based on anger, 64
 due to negligence, 67-68
 for futile reason, 64-65
 prohibition during war, 68-69
 with aggression motive, 63-64
 without pressing needs, 66-67
 Islamic concept, 39, 54
 Islamic policies, 1-7
 cleanliness, 46-48
 cultivating dead lands, 44-46
 fairness, 51-54
 green earth, 39-46
 health care, 48-51
 ihsan, 51-54
 manage, 1-7
 natural resources, 23
 air, 31-33

 Islamic perspective, 23
 soil, 24-27
 water, 27-31
 preservation, viii-ix, x, xi, 9
 relevance to the Islamic knowledge, 7
 knowledge of Quran & sunnah, 19-21
 knowledge of ethics, 10-14
 knowledge of *fiqh*, 14-15
 knowledge of *usul fiqh*, 15-19
 knowledge of *usuluddin*, 7-10
 sustainability, 39
 sustainable, 7
 threat of extinction, 115
 the role of human, 9-10

F

Fauna, vii, 1, See animal
Fair, 70
 fairness concept, 70
Flora, vii, 1, See plant

H

Human, 1, 2
 the creation of man, 1, 2
 the creation process, 1, 2
 role, 2



I

Islam, vii-viii, ix, xi, xiv, xvii, 1, 3-4, 39, 86-87
 hunting practices, 86
 equipments for hunting , 86-88
 overhunting, 88-89

N

Nature, 23
Natural resources, 36-38
 animal, 37, See fauna
 construction materials, 38
 earth, 37
 fuel, 38
 metal, 38
 water resources, 38
 wood, 37

S

Sea Turtle, 95-113
 enactment, 105
 enforcement, 105
 Green Turtle, 96-97
 status, 97
 Hawksbill Turtle, 96-97
 status, 97
 importance, 96
 indicator spesies, 98
 part of the marine ecosystem, 98-99
 sybmitic animal, 99
 stabilise population , 99-100
 law, 105

Leatherback Turtle, 96-97
 status, 97
 management, 105
Olive Ridley Turtle, 96-97
 status, 97
 population, 97
 protection, 105
 role, 96, 109-112
 rules, 105
 threats of extiction, 100
 artificial light sources, 102
 capturing of turtles, 103
 coastal zone development, 101
 pollution, 102-103
 trawling, 102
 turtle egg harvesting & selling, 103-104
 uncontrolled tourist activities, 101-102

T

Tiger, 73-86, See *Panthera tigris*
 conservation, 73, 82-83
 hunting, 84
 Islamic perspective, 84-86
 law of protection, 83-84
 management practice, 81-82
 sub-species, 74
 Panthera tigris altaica, 75
 Panthera tigris amoyensis, 75
 Panthera tigris corbetti, 75
 Panthera tigris jacksoni, 75
 Panthera tigris sumatrae, 75
 Panthera tigris tigris, 75
 threat, 76
 conflict with human, 79-81





destruction of wild habitat, 76-78
poaching, 78-79
trade, 78-79
unplanned development, 78

W

Wildlife, vii-viii, ix, xi, xiv, xvii, 79-81
conservation, vii-viii, ix, xi, xiv, xvii
trade, 89
Islamic perspective, 89-91



Islam, Wildlife Conservation and You

Currently, we find that the quality of the environment is on the decline to the extent that it is causing imbalances to the diversity of both terrestrial and marine ecosystems. Consequently, it is also impacting on wildlife species that inhabits it such that some are on the brink of extinction. This situation is exacerbated when human desires economic profits and willingly betrays the trust to manage the environment sustainably and to preserve the diversity of life in it.

Thus, this book is published with the goal of providing knowledge and cultivating consciousness within the society on the importance of the environment and the delicate role that all life plays in maintaining the balance of ecosystem and the environment as a whole.

It is hoped that the Islamic approach used in this book can enlighten readers and inject an awareness to better appreciate nature and the multitude of God's creations in this earth. And subsequently, creates a society that strive to conserve it from all forms of threats.



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