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Qur'anic Ecological Analysis of Wildlife and Biodiversity Protection

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Abstract

Purpose: The objective of this research is to examine the Qur'anic ecological perspective about the preservation of wildlife and biodiversity protection. Through the approach of Qur'anic studies, this research identifies ecological values and teachings that encourage human responsibility towards nature.

Methodology: With the kind of library research or literature study, a qualitative research methodology is applied. The research method involves analyzing Qur'anic texts related to the environment, wildlife, and biodiversity, focusing on concepts such as khalifa (earth-sustainer) and amanah (responsibility). In this study also used a semantic approach that is useful in analyzing Qur'anic verses about ecology.

Results: The results showed that the Qur'an contains values that support the protection and preservation of wildlife and biodiversity. The implications of these findings could provide a basis for the development of environmental protection strategies rooted in Islamic values. Applications/Originality/Value: This research is expected to provide a better understanding of the relationship between religious teachings and biodiversity, lead to ecological awareness in daily religious practice, as well as provide a basis for Islamic-based nature conservation advocacy.

Introduction Section

Environmental protection and biodiversity conservation are global issues that are increasingly urgent to address. This is due to a lack of awareness and understanding of environmental issues, supported by weak law enforcement for those who damage the environment on a large scale. Rapid climate change, legal poaching, and habitat degradation pose threats to biodiversity and wildlife.

In this context, the understanding of religion as a guide to environmental ethics becomes very relevant. Islam, as a religion of overarching teachings, provides a special view of the human relationships, nature, and Allah's creatures and has the potential to provide a strong ethical foundation in efforts to protect wildlife and biodiversity.

Although much research has been done in the field of environment and biodiversity, in-depth analysis related to the ecological perspective of the Qur'an still needs to be done. Muslims can be inspired and given an ethical foundation for protecting the environment as part of their duty to preserve the planet by learning more about the ecological principles included in the Our'an.

Therefore, the purpose of this research is to examine how the Qur'an's ecological worldview addresses wildlife and biodiversity. Thus, it is hoped that this research can provide a deep understanding of how Islamic teachings through the Qur'an and can be a guide in preserving the environment and biodiversity in the midst of increasingly complex global challenges

Method

The study used a qualitative approach, similar to that of a library research or literature study. Qualitative research is a form of research that produces scientific work that uses descriptive data in the form of written or spoken words from people or observable behavior on the status of a group of people or humans, an object and a group or culture. In this case, literature research is carried out through books, scientific articles, journals related to the concept under study.

This study also uses a semantic approach in analyzing Qur'anic verses that discuss ecology. Technically, semantics is the analytic study of key terms of a language with a view that ultimately arrives at a conceptual understanding. The

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semantic approach aims to provide a new understanding of what the Qur'an offers to people so that they can apply the concept in their daily lives (Fahimah, 2020).

Results and Discussion

Ecology in the Perspective of the Qur'an

Ecology can be seen as a science that examines the ins and outs of the household of living things because the name derives from the Greek words, 'oikos' which means household and 'logos' which means science (Mardliyah et al., 2018). While in terminology, ecology is a science that studies the mutual relationship between living things and the surrounding natural conditions. Based on this definition, ecology can be characterized by three crucial elements: mutual connections, interactions among organisms, and associations between organisms and their surroundings.

Ecology with the environment are two different things. As described by Harun M. Hussein, the environment is the space occupied by living and non-living things that influence each other with the surrounding nature (Syahidu, 2021). When viewed from these two definitions of the term, ecology centers on the discussion of species, ecosystem, and habitats, while the environment centers on the discussion of human social, economic, and material life.

The definition of ecology in the Islamic view is found in Q.S al-An'am: 38 as follows:

"Not any creature on the earth, nor any bird that flies with its wings, but they are communities like you. We have not neglected anything in the Book; then to their Lord, they will be gathered." (Indonesia, 2002)

According to Mujiyono Abdillah, this verse implies that the entire human community, flora, and fauna are a family (Amaruddin & Wahidi, 2022). From this interpretation, it can be reflected that in ecology humans are also part of nature. Humans are an internal part of the ecosystem. The entire ecosystem is interconnected and related, if the of them is damaged, it will have an impact on other ecosystems. So no matter how great and smart humans are, they are still part of the environment. Humans do not have the right to exploit nature, because all components of the environment have the same ecological rights (Manik, 2023).

In the perspective of the Qur'an the term ecology there are various terms. The term ecology in the Qur'an is mentioned with various terms, among others, whole of nature (al-'alamin), universe (as-sama'), earth (al-'ardh), environment (al-biah), humans (al-insan), fauna (dabbah), and flora (an-nabat atau al-harts) (Akbar, 2023).

1. Whole of Nature

Whole of nature is often referred to by the term *al-'alamin*. This word is mentioned 73 times with various forms of derivation and is found in 30 surahs. The word *al-'alamin* which is preceded by the word *rabb* is mentioned 42 times in 20 surahs and the rest which is not preceded by the word *rabb* is mentioned 31 times in 7 surahs (Al-Baqi, 1987). Based on these verses about *al-'alamin*, the word *rabb al-'alamin* is entirely used to connote God of the entire universe or God of all species, both biotic and abiotic spesies which include human species, animals, plants, air, ocean, and others (Akbar, 2023).

2. Universe

The word *as-sama*' is used by the Qur'an to introduce the universe. It's a plural derivative is *as-samawat*. In total, this word is mentioned 387 times and its derivations. The word in its mufrad is mentioned 210 times and its plural form 177 times (Al-Baqi, 1987). From all these words, Mujiyono Abdillah classifies the meanings divided into the meaning of the universe, air space, and space (Suhendra, 2013).

Overall, the various connotations of the word *as-sama*' found in the Qur'an refer to the universe. Because the universe consists of air space or biosphere and space or lithospher and statospher. So it can be said that the universe which includes atmospheric and biospheric space is one of the terms used by the Qur'an to reveal the term environment. Because, factually, the universe environment essentially consists of air space or atmosphere and space (Fauzan et al., 2020).

3. Earth

The word earth is often referred to by the term *al-'ardh*. This word is used in the Qur'an 461 times covered in 80 surahs (Al-Baqi, 1987). The word *al-'ardh* is always mentioned in the form of the mufrad form and never appears in the plural form. Abdillah explains that in quality, the word *al-'ardh* has at least two meanings. *First,* it means the environment of planet earth that is already occupied by humans and various geological phenomena.

Second, it means the planetary environment in the process of becoming, namely the process of creating nature and the occurrence of planet earth (Fauzan et al., 2020).

4. Environment

The phrase *al-biah* is frequently used to relate to the word environment. This word is mentioned 18 times in the Qur'an (Al-Baqi, 1987). The Qur'anic usage of the lafadz *al-biah* derivation implies that the environment is a palce where humans live. The ecological tradition, which hold that the environment is everything that exists outside of an organisms, seems to be in accord with the use *al-biah* etymologycal connotation, which refers to the environment as a living area. The dwelling space and everything outside of it are the same (Akbar, 2023).

5. Human

The phrase *al-insan* and *an-nas* are frequently used interchangeably with the word human. The word *al-insan* in the Qur'an is mentioned 90 times along with its derivations. While the word *an-nas* is mentioned 240 times (Al-Baqi, 1987). Allah intentionally created human to manage the earth and utilize it as best as possible for their own happiness. Therefore, Allah gave the advantages to human in the form of reason, thought, and feelings as well as the ability to carry out their duties as caliphs on earth.

6. Fauna

The word fauna or animal is found in the Qur'an with the terms *dabbah* and *al-an'am*. The word *dabbah* itself is mentioned 18 times consisting of 14 forms of mufrad and 4 in the plural form of taktsir (Al-Baqi, 1987). Term *dabbah* in the Qur'an has 3 meanings: (1) Addressed to specific animals, as in Surah al-Baqarah: 164; (2) Addressed to animals and humans, as in Surah an-Nahl: 49; and (3) Addressed to animals, humans, and jinn, as in Surah Hud: 6 (Shihab, 2007). While the term *al-an'am* is mentioned 32 times in the Qur'an (Al-Baqi, 1987). The word *al-an'am* can be interpreted as grazing property, such as gold, silver, rice fields, and horses (Shihab, 2007).

7. Flora

The word flora in the Qur'an uses the term *an-nabat* or *al-harts*. The word *an-nabat* in the Qur'an is mentioned 9 times, while the word *al-harts* is mentioned 12 times (Al-Baqi, 1987). Another redaction that the Qur'an mentions to show flora is *fakihah*. *Fakihah* linguistically means good and happy, then this word is interpreted with delicious fruits and delicious taste. This word is mentioned 11 times in the mufrad form and 3 times the plural form (Abdillah, 2001).

Based on semantic data about ecology in the Qur'an, it can be concluded that the concept of the environment in the Qur'anic perspective has a broad meaning that includes the living environment of all species, both those on earth and space and even those outside space. Since the balance of ecosystems on earth is, in reality correlated with ecosystems outside its boundaries. As a result, the Qur'an requires all people to protect the ecosystem's carrying capacity both inside and outside of the earth's planetaru environment.

Responsibility for Nature

In conserving the environment, the Qur'an has chosen humans to take responsibility on earth with the title of caliphs. Caliph comes from Arabic which originally meant 'who replaces' or 'who comes after who came before'. The Caliphate consists of the authority bestowed by Allah, the creature who is entrusted with the task, and the area of duty (Zulfikar, 2018). In Q.S. Fatir: 39, Allah says:

Translation:

"He is the one who made you successors (khalifah) on the earth. Whoever disbelieves (the consequence of) his disbelief will be against himself. And the disbelief of those who disbelieve will only increase their Lord's displeasure, and the disbelief of those who disbelieve will only increase their own loss." (Indonesia, 2002)

In this verse it is explains that every human being is given the task of building the world and preserving it accordance with Allah's guidance. Humans have been given the gift in the form of potential to manage and prosper the earth according to their respective abilities (Shihab, 2002). The process of prospering the earth, managing and benefiting must be done collectively by all human beings. A principle of mutual reminder and mutual help is also the key to success in conserving

the environment. If there is no sense of concern for fellow humans beings or the environment, then adverse impacts will emerge (Rodin, 2017).

Based on the explanation above, there are five important points that must be done in taking responsibility for nature, including:

1. Maintaining the Balance of Nature

In exploiting the natural environment, humans need be mindful of how to preserve the natural order, the environment, and existing habitats without damaging them. This is consistent with what Allah says in Q.S. al-Mulk: 3 as follows:

"(He is the one) who created seven heavens in layers. You will not see in the creation of the Most Merciful any imbalannee. So, look again! Do you see any flaws?" (Indonesia, 2002)

Thematically, this verse is in a group of 3 verses (3-5) that are explaining the form of God's power. In this third verse, God has revealed His power by creating seven heavens arranged in layers, then God commands His servants to pay attention to the balance of nature that God created. In the next verses, verses 4 and 5, God reaffirms that His creation has no defects. As a form of perfection and balance of His creation, God adorns the sky with glowing stars like lamps shining on the settlement at night. For those who disobey and commit evil acts on earth, Allah expressly threatens and prepares a very painful sacrifice and is sent to hell (Zulfikar, 2018).

Based on this verse, the existence of nature is created in perfect harmony and harmony, so that natural conditions can run according to the purpose of its creation. The disproportionate creation of nature will cause the inhabitants of a planet to experience the hardships that lead to interplanetary collisions. The creation of various beings that have a reciprocal relationship with each other will be able to help and have an impact on happiness on life on earth (Al-Misbah, 2002).

In maintaining this natural balance, humans must also stick to a fair and moderate attitude and not excessive. Because when man has behaved excessively, he tends to be deviant, negligent and destructive (Qardhawi, 2002). With this just and moderate attitude, the balance that God creates in an environment will continue and remain harmonious.

2. Maintain Environmental Cleanliness

Cleanliness is one of the teachings of Islam that must be maintained and practiced by every human being in everyday life. Allah says in Q.S. al-Baqarah: 222, as follows:

Translation:

"And they ask you (Prophet Muhammad) about menstruation. Say, 'It is discomfort, so keep away from wives during menstruation and do not approach them until they are cleansed. When they have purified themselves, then come to them as Allah has directed you. Surely, Allah loves those who repent and those who purify themselves'." (Indonesia, 2002)

Thematically, this verse speaks of Allah's love for His servants who always repent and cleanse themselves. Cleanliness in this context indirectly leads to aspects of worship and moral aspects that are not only slogans or theories, but must be used as a practical lifestyle that educates every human being to always live clean at all times. Clean living in the Islamic view is part of faith (Al-Misbah, 2002). As a result, the degree to which a person's faith is perfected depends not only on the number of worship ceremonies they participate in, but aslo on how well they maintain and clean their surroundings.

3. Raising and Protecting Animals

The Qur'an has explained how important the conservation of animals or animals, as well as maintaining the balance of ecosystems on earth so as not to become extinct. Allah says in Q.S. Hud:6, as follows:

Translation:

"And there is no creature on earth but that upon Allah is its provision, and He knows its place of dewlling and its place of storage. Everything is recorded in the clear Book (Lauh Mahfuz)." (Indonesia, 2002)

Thematically, this verse speaks of God always caring for and protecting His creatures, including animals by giving food and monitoring their dwellings. The word dabbah in this verse is interpreted by Quraish Shihab with the meaning of moving and crawling. It is commonly used for animals other than humans, but its basic meaning can also include humans. The choice of this word suggests that sustenance is guaranteed by Allah who requires every *dabbah* to function itself as its name suggests, that is, to move and crawl (Al-Misbah, 2002).

Thus, it is understandable that this verse shows the importance of conserving animals, both pets and wild animals (wildlife), because in maintaining the balance of ecosystems on earth there is also a need for human involvement.

4. Greening

One of the concepts of environmental conservation in Islam is greening, namely by planting and farming or in Geography called reforestation. The purpose of planting is so that the land can be restored, maintained, and improved fertility. Prophet Muhammad (peace be upon him) classified those who plant trees as sadaqah (Rosdiana, 2013). In Q.S. al-An'am: 99 Allah says as follows:

Translation:

"He is the one who sends down water from the sky, and with it. We bring forth various kinds of plants. Then, We produce lush vegetation from it, and from it, We bring forth clustered grain. And from the date-palm, with its sheathed clusters, We bring forth bunches of dates hanging low. We cultivate vineyards and olive and pomegranate trees, alike yet different (in taste and appearance). Look at their fruits when they ripen and their maturation. Surely, in all these are signs for people who believe." (Indonesia, 2002)

Thematically, this verse belongs to a group of three verses (97-99) that explain the command to know God's greatness through His creation. In the previous verses (verses 97 and 98) God calls on men of knowledge and insight to pay attention to every animal and human created by God without anyone's help. Then in this verse, Allah shows the believers that the concrete form of His greatness is rainwater falling from heaven, which then grows all kinds of vegetation. From the plants it will turn into a verdant plant, so that out of the verdant plant in the form of dense fruits (Al-Misbah, 2002).

From the explanation above, there are three important points that can be taken. *First,* it appears that God demonstrated His greatness by evidence of the process of creating seeds or fruits from beginning to ripening. *Second,* water plays an important role in helping to grow various plants to bear fruit. *Third,* reforestation or reforestation that can help environmental conservation, including the results can also be used both in terms of fruits, leaves, and stems.

5. Managing Dead Land

Managing and utilizing dead land for cultivation is one form of human awareness in treating the aging earth by utilizing unproductive land, restoring land functions, and making it a business as well as playing a role in conservation efforts. Dead land means vacant land that is no man's land, has no water, is not filled with buildings, and is not managed or utilized (Al-Qardhawi, 2002). Allah has explained this in Q.S. Yâsin: 33, as follows:

Translation:

"And a sign for them is the dead earth. We revive it and bring forth grains from it, and they eat from it." (Indonesia, 2002)

Thematically, this verse talks about the earth being dead and there are no plants at all. God sent rainwater on him and the earth was alive, fertile, and grew every plant of different kinds and varieties, even gaining beauty and benefit by removing grains that were food for humans and animals. Quraish Shihab stated this verse as a sign of

involvement other than Allah in bringing the dead earth to life, namely human involvement that affects the management of plants to maintain the balance of the environment and ecosystem (Al-Misbah, 2002).

Managing dead land is highly recommended in Islam, because in addition to providing benefits for managers for agricultural development, managing dead land also helps in conserving the environment and increasing sources of production in the economy. In addition, people who conserve the environment by managing this dead land will be rewarded for going to heaven, because it is in line with the Prophet's Hadith which states that those who cut trees unjustly and do not preserve them will be sent to hell (Nahdi & Ghufron, 2009).

Conclusion

Based on the explanation above, several points can be concluded related to the ecology of the Qur'an towards the protection of wildlife and biodiversity. The concept of ecology encompasses mutual connections, interactions among organisms, and the associations between organisms and their surroundings. Various terms related to ecology designated by the Qur'an in its verses include: all nature (al-' *alamin*), *heaven or universe* (as-sama'), earth (al-ard), *environment* (al-biah), man (al-insan), *fauna* (*dabbah*), and flora (*an-nabat or al-harts*). The discussion of protection and biodiversity has been revealed in several verses of the Qur'an as a command to take good care and care of the surrounding environment. There are also efforts that can be made by humans as caliphs on this earth, among others: by maintaining the balance of nature, maintaining the cleanliness of the environment, maintaining and protecting animals, afforestation and managing dead land

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