Abstract.
Natural disasters are a key issue of contemporary society and an inspiration for the emergence of new theories such as theories of eco-theology, eco Sufism, fiqh al-bi’ah, ecofeminism, biocentrism, and anthropocentrism. These theories were initiated to seek solutions to natural disasters. However, disasters and calamities continue to occur. One of the causes is the lack of human awareness of the importance of environmental conservation. This article formulates comprehensively the Prophet’s teachings on nature conservation with a focus on two questions: (1) What are the forms of nature conservation? and (2) What understanding can be derived from the teaching? Based on the linguistic analysis with the contextual approach, it is concluded that Islam has introduced the concept of nature conservation from the beginning including: (1) nature conservation phases in the forms of (a) maintenance, preservation, and processing of land and (b) protection and prevention and (2) understanding of these shapes leads to motivation and responsible elements in conservation programs to actualize ecological piety.

Keywords: ecotheology, fiqh al-bi’ah, hadith, conservation, understanding

1. Introduction
Various problems that occur in rainy season such as floods and landslides, as well as long dry season that bring droughts and forest fires, not only occur in Indonesia but in various parts of the world. [1] [2] [3] The attitude of the society is also different in dealing with it. One party makes it a serious problem that must be immediately solved, so that required various rules and policies through presidential decree, regulation [4] [5] nor environmental care institutions to develop programs that are preventive and curative. [6] [7] [8] [9] On the other hand, the phenomenon is considered routine and natural custom which is finally accepted in the absence of an effort.

Aside from being a central issue of contemporary society, the above issues have inspired Muslim and non-Muslim theologians to come up with the best solution. Various
studies and researches have produced new theories, both paradigmatic-ecological such as ecotheology, ecosufism, fiqh al-bi’ah, or ethics such as ecofeminism, biocentrism, anthropocentrism. According to Aziz, one of the causes of natural destruction is the transcendental paradigm factor that considers environment is not part of religious obligation (Islam). Therefore, human must have three paradigms of nature conservation in exploiting nature, including: al-intifa’, al-i’tibar, and al-ishlah. These three ethical environments not only talk about the pattern of triangular interactions among humans, nature and living things, but also illustrate the pattern of triangular interactions among human (caliph), nature, and God, known as "habl minannas, habl minal alam, and habl minallah", or the term "habl ma’a ikhwanih, habl ma’a bi’atih, and habl ma’a khaliqih.

According to Quddus, through the paradigm of ecology, human is required to have an integral and ethical-theological and ethical-anthropological dimensional environmental insight. Through his comparative study of the principles of Islamic ecotheology and modern environmental ethics, Quddus formulates three relevant Islamic ecological principles as the basis of today’s ethical management of nature: the principles of monotheism (unity of all beings), the principle of amānah-khalīfah (honesty-leadership), and ākhirah (responsibility). Furthermore, this transcendental theology paradigm is expected to immerse religion and contribute to solve various problems of the ummah. In this case, religion is no longer seen only as a matter of "heaven" and busy with "defending God", but it is the solution to the contemporary current problems of Muslims and humans in general.

The study of the ecological paradigm abovestates that the essence of religious teachings teaches to maintain unity, balance and sustainability of the ecosystem. However, in the applicative level, the normative teaching has not been implemented properly. There is still an imbalance between theoretical insight and the practical attitude of society. Some people have cognitive awareness of the importance of preserving nature, but it has not been reflected in its practical behavior. Meanwhile, some are actively involved in the environmental conservation agenda, but have cognitive awareness that their activities are part of the theology’s teachings so that what has been formulated by academics and embodied by practitioners has not been able to solve the very complex ecological problems in reality.

The religion of Islam based on the Qur’an and hadith has taught its people about human relations with its environment. In general, Allah has provided important clues in the Qur’an regarding environmental conservation efforts. Then the Holy Prophet through his sunnah explains it by providing more specific signs and restrictions. The importance
of studying environmental problems from the perspective of the Sunnah of the Prophet who has been codified in various books of hadith starts from here.

The focus of the study of this article is to formulate the Prophet’s teachings on comprehensive nature conservation and to explore the meaning of ecological hadith linguistically for the sake of contextualization. The exploration of the meaning of this hadith aims to provide a theological and ethical foundation to the society which implies the growth of ecological awareness that the environment is also a blessing from Allah which must be preserved and accounted for in the afterlife. As for the formulation of the problem in this discussion are: 1) How are the forms of environmental conservation taught by the Prophet? 2) What patterns of understanding can be taken from the teaching? Furthermore, this research is expected to erase the stigma of the society towards the religion which is understood to be limited to the worship services in the narrow sense, as well as to contribute positively to the problem of nature conservation.

2. Method

Nature conservation is the protection, preservation and utilization of ecosystem to secure the existence, sustainability of natural resources and biodiversity. Since this term is not found in hadith editorial, the data explorations are diverted to the relevant terms. The word “nature” itself contains at least three components, i.e human, animal, and plant. In this context, nature is focused on plants or crops. The search of the hadith in this article uses two methods: 1) Takhrij al-hadis bi al-lafdzi, i.e the searching of hadith through key words assumed to lead to the theme (indicative term). 2) Takhrij al-hadis bi al-moudhu’ is a thematic search of hadith. [20] [21] Meanwhile, the understanding of meaning is done using the contextual method through the process of linguistic analysis and socio-historical context. [21] [22]

3. Results

3.1. Categorization of Hadith

The searching of hadiths about nature conservation through keyword gharasa (غَرَاسَةً) and zara’a (زَرَا) discovers 20 scattered hadiths in various hadith books, either separately or collected in a single book. The word gharasa appears 20 times, while the word zara’a appears 11 times. While using thematic search of hadith, they are found in several different themes, such as in chapter of faith, alms and others. Based on these
findings, variations of hadiths about nature conservation can be categorized as follows: 1) Maintenance, preservation and processing of land; 2) protection and prevention. From the text side, the first category of hadith is usually expressed in the style of preaching (khabar), advice (targib) and command (amr); while the second hadith is in the form of prohibition (nahy) and threat (tarih). Hadiths on the maintenance and preservation of nature can be seen in the following table:

<table>
<thead>
<tr>
<th>No</th>
<th>Theme</th>
<th>HADITH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Eminence of planting and its reward</td>
<td>Mukharrrij Number</td>
</tr>
<tr>
<td>11</td>
<td>Al-Bukhari 2152, 5553</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Muslim 2900, 2901, 2903, 2902, 2904</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Al-Tirmizi 1299 &amp; 1303</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Al-Darimi 2496</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ahmad bin Hanbal 12038, 12910, 13064, 13065, 25798 &amp; 26095, 12529, 14668</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Planting tree even though the doomsday is in sight</td>
<td>Ahmad bin Hanbal 12512 &amp; 12435</td>
</tr>
<tr>
<td>33</td>
<td>Cultivate less productive land (ihya al-mawat)</td>
<td>Al-Bukhari 2167</td>
</tr>
<tr>
<td></td>
<td>Al-Tirmizi 1299 &amp; 1300</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Al-Darimi 2493</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Abu Dawud 2671 &amp; 2672</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ahmad bin Hanbal 13753, 13842, 14109, 14310, 14383, 14550 &amp; 13976</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Malik 1229 &amp; 1230</td>
<td></td>
</tr>
</tbody>
</table>

While the Prophetic hadiths on protection and prevention can be seen in the following table 2:

<table>
<thead>
<tr>
<th>No</th>
<th>Theme</th>
<th>HADITH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prohibition of cutting down the tree</td>
<td>Mukharrrij Number</td>
</tr>
<tr>
<td></td>
<td>Abu Dawud 4561</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Prohibition of defecation under the tree</td>
<td>Ibnu Majah 323</td>
</tr>
<tr>
<td>23</td>
<td>Prohibition of damaging plants in the Land of Haram (Mecca and Medina)</td>
<td>Bukhari 1703, 1262, 1484, 1702</td>
</tr>
</tbody>
</table>
3.2. Analysis of Meaning: Text, Context and Contextualization

To begin the discussion of nature conservation, there will be some popular hadiths representing each category.

3.2.1. Hadiths about The Suggestion of Planting Trees and Plants

Hadiths about the suggestion of planting trees and plants, are expressed as follows: [23]

There are two forms of words mentioned in the hadith above: First, the word "garasa-yagrisu", "zara’a-yazra’u" is an active verb (fi’il muta’adi) consisting of three words (tsulatsi mujarrad), which means to plant, as well as "akala-ya’kulu" which means to eat. Term garasa includes a more general meaning of planting tree seeds [24] in form of monocot and dicots plants, both growing in the short and long term. While the term zara’a leads to the more specific meaning of planting by sowing the seeds of plants that grow in a relatively short time, which in Arabic is called nabat. [24] In an ecological context, these two words lead to different activities; garasa means reforestation (replanting) and conservation (protection). While zara’a means farming.

Second, the noun (isim) consisting of three groups, ie 1) "garsan" and "zar’an"; 2) "thair" and "bahimah"; and 3) "insan", these refer to the three elements of ecosystem-forming, ie plant, animal, and humans.

In terms of semantic-contextual analysis, the three verbs (fi’il) in the first form lead to an activity, which is to produce and consume. While the noun (isim) refers to the subject and object of activity (producer and consumer). This is a very beautiful illustration associated with the dual status of humans. Besides being a producer, humans also act as consumers. To be able to "eat" (ya’kulu) and enjoy the crop (consumer), he must first plant (yagrisu or yazra’u), which act as the subject (producer). It means that human beings should not only sit idly to take advantage of the natural resources, but also must involve and participate actively in maintaining and preserving nature in order to remain productive.

On the other hand, the term garasa and zara’a in some hadiths are mentioned separately, while in the other hadiths are called simultaneously. Taken into account, mentioning simultaneously indicates the meaning in the same urgency and significance level. Therefore, both activities should receive the same attention and be done simultaneously, in harmony and in balance. This means that the activities and efforts
of reforestation, conservation and cultivation must be done simultaneously. For the Indonesian context, the meanings contained by terms garasa and zara’a can lead to tasks and responsibilities carried by different departments, ie forestry, plantations, and agriculture. All these three must work together in formulating their vision, mission and action.

Mentioning separately shows indicates a particular emphasis. In some narrations, the term gharasa is associated with the term date palm,[23] No. Hadith: 2900; 2901; 2903, [25] No. Hadith: 2496, [26] No. Hadith: 1259; 14668. The date palm (nakhl/phoenik dactylifera) in the Arab cultural structure has its own meaning. In Arab societies, palm tree in addition to occupying a central role as a state foreign exchange, it is also known to contain very complex compounds, such as minerals, sugars, fats, proteins, fiber and some vitamins. [27] In accordance with the complexity of its content, it is medically beneficial to both physical and spiritual health. [27]

Why should date palm? In terms of shape, the fruit is shady, easy to pick, and eaten in a raw or cooked, and can be used as a drink. The roots are down and directly absorb water from the earth. The date palm cannot bear fruit in a short time. That is, if the desired plant is a long term one, then the term used is gharasa and not used term zara’as in the type of date palms (an-nakhl). While the term zara’a for short-term, fast-growing crops such as grain-like plants, Habbatus sauda’, rice, corn, or wheat. Noticing the urgency of the date palm in the Arabic context, the Prophet still ordered to plant it even if the apocalypse was in sight. [26] No. Hadith: 12512, 12435.

If the two terms are linked to the Indonesian context, the term gharasatends to mangrove, teak, mahogany, coconut (cocus mucifera) tree, sugar palm (arenga piñata), gypang (corypha utan), palm or siwalan (borassus flabellife), nipah (nypa fruticans), sago (metroxylon sago), zalaca (salacca zalacca) and rattan (calamus rottan), [28] while the term zara’aleads to a similar plant of rice, tubers, and vegetables. In addition, the mention of dates in the hadith shows an example of orientation in the process of planting not only for plants that can be harvested but also plants that are long-term. This shows the futuristic teachings of the Prophet that man can now enjoy the results of the work of his predecessors. Therefore, the living human now must think about the life of the next generation.

The end of the narrative of the hadith is closed with the word "shadaqah" or "ajr." In the context of the whole word and relation between the two previous types of words, it is understood that any role and activity that man performs, both as subject (actor, producer) and object (consumers), should be religion-oriented, not just worldly needs. The agenda and activities which lead to the process of preservation and conservation
of nature must also contain elements of worship. Thus, humans in relation to nature not only use them to achieve certain ends and take benefits (al-intifa’), but also have an obligation to maintain and preserve them (al-ta’bir wa al-ishlah). [29] From here it can be stated that nature conservation is a part of religion and becomes the task of humans as khalifah fi al-ardh by creating harmonious interaction and togetherness in obedience to God. [QS. 57: 1, QS. 59: 61, QS. 13: 13] and [QS. 17: 44].

3.2.2. Hadith about Treating Empty and Barren Land

Hadith about treating empty and barren land, as follows:

From Jabir bin Abdullah said; Allah’s Messenger (May peace be upon him) said: "Whoever revives a barren land, he is entitled to his reward (harvest), and as for what is eaten by animals it becomes alms to him" [26] No. Hadith: 13753

There are two verbs in the hadith above, namely "ahya ardhan" and "akalat al-'awafi". The first verb shows productive activity, which is to turn (process) dead (barren) land; while the second one shows consumptive activities, ie creatures that relish production. Like the previous hadith, these two activities are associated with the term "ajr" and "shadaqah". This means that both are also part of the religious activity to be rewarded.

Cultivating and exploiting empty land for planting is one form of human consciousness about the age of the earth which is getting older. Utilizing unproductive land and restoring its function is one of nature conservation efforts. In Islam, it is known as ihya al-mawat, which is a shari’a in prospering and exploiting the earth for the benefit of human beings both individually and collectively. [30] The spirit of ihya al-mawat is an instigation to every Muslim to manage the land so that there is no abandoned and unproductive area, so as program of greening, exploiting, maintaining and preserving environment can be realized.

3.2.3. Hadiths about the prohibition of logging

There were found some hadiths containing the prohibition to cut down tree, among them is lote tree, as in the following hadith:

From Jabir bin Abdullah said; Allah’s Messenger (May peace be upon him) said: "Whoever revives a barren land, he is entitled to his reward (harvest), and as for what is eaten by animals it becomes alms to him" [26] No. Hadith: 13753

There are two verbs in the hadith above, namely "ahya ardhan" and "akalat al-'awafi". The first verb shows productive activity, which is to turn (process) dead (barren) land; while the second one shows consumptive activities, ie creatures that relish production. Like the previous hadith, these two activities are associated with the term "ajr" and "shadaqah". This means that both are also part of the religious activity to be rewarded.

Cultivating and exploiting empty land for planting is one form of human consciousness about the age of the earth which is getting older. Utilizing unproductive land and restoring its function is one of nature conservation efforts. In Islam, it is known as ihya al-mawat, which is a shari’a in prospering and exploiting the earth for the benefit of human beings both individually and collectively. [30] The spirit of ihya al-mawat is an instigation to every Muslim to manage the land so that there is no abandoned and unproductive area, so as program of greening, exploiting, maintaining and preserving environment can be realized.
There are several keywords that need to be elaborated, namely "sidraḥ (lote tree), yastadhillu biha (for taking shelter) and qatha’a abatsan wa dhulman (cut down in vain and unjust) shawwaba (drowning the head).

Sidraḥ (Ziziphus mauritiana) is one of the fruit tree species mentioned in the Qur’ān and hadith which is often used in the treatment tradition of Prophet Muhammad (Tibb al-Nabawi). In Indonesia, this plant is known as bidara tree. In the Arabian Peninsula, this plant usually grows in hot deserts, so it is often used to take shelter and take the fruit at once by people who are on the way or when looking for grass, dwelling, shepherding place and other purposes. The lote tree is a type of tap root plant that can grow up to 15 m tall, and contains multiple benefits in it. Almost all of its parts, ranging from roots, bark, wood, leaves, and fruit can be used for health and nutrition as well as materials for household appliances. [29] Seeing its significance to the context of the Arab region, the Prophet severely criticized its logging. The threat (tarhib) is the Prophet’s concern for the environment.

In Indonesia, especially in the region of West Nusa Tenggara (NTB) and Bali, there is also a kind of lote tree called sealote tree (Strychnos lucida R.Br.). This plant, widely used to treat some diseases such as malaria, fever, skin diseases, blood circulation disorders, relieve pain, stimulate the nervous system and increase appetite. Active substances contained in it are strychnine, loganin, brusin, tannin and steroids. Parts of plants used as medicinal ingredients are stems, skin and fruit. Sea lote tree has the potential to be used in rehabilitation activities in dry climates and effort to control landslide. [31]

In addition to the lote tree logging, in another hadith the Prophet also forbids the cutting of trees and plants in Makkah and Medina, as hadith from Amir bin Sa’ad, the Messenger of Allah said: "I made the city of Medina a haram, that is between the two hills rocky black. Do not cut down the trees, and do not kill the animals [32] No. Hadith: 2426, [23] No. Hadith 1703; 1262; 1484; 1702. The Prophet made these two areas as hima (forbidden areas) that were protected by nature. [16]

3.2.4. Hadith about The Prohibition of Defecation Under a Protected Tree.

(Mu’adz said): Indeed, I have heard the Messenger of Allah say: "Fear you of the three cursed deeds, which are defecation in public places, in shelter, and in the middle of the road." [32] No. Hadith: 323.
In general, the hadith above contains the prohibition of defecation (al-mala’in) in three places, namely: (1) water sources (al-mawarid); 2) shelter (al-dhili); and 3) middle of the road. Those places are public facilities that must be preserved from all forms of pollution. The hadith indicates that the Prophet was very concerned about ecological sterility.

4. Discussion

Based on the findings above, this article entirely provides foundation and can be used as basic step in environmental law (fiqh al-bi’ah). The exploration of meaning from the source of the hadith concludes about obligation to preserve and protect nature’s sustainability for the sake of survival and life. Preserving life is obligatory, then all tools and media that support the realization of the goal become obligatory also, It is in accordance with Qaidah Ushuliyah "ma la yatimmu al-mandatory illa bihi fa huwa wajib" or "al-amr bi syay’in amrun bi wasa’llihi.”

On the other hand, in the context of ecological theory and paradigm, the findings in this article are an affirmation of the construction of the ecotheological paradigm. If ecotheological is more based on the Qur’an in formulating environmental conservation all this time, this study completes and refines the formulation. If this study is connected with the paradigm of ecosufism, it is in line with the ethical offer of ecosufism. The ethical-spiritual consciousness which is derived from the hadith interpretation about nature conservation strongly supports the theory.

If this study is associated with the paradigm of fiqh al-bi’ah, a proverb is worthy to put forward “Al-Insan ibn bi’atihi” (Humans are children of their environment). This Arabic proverb implies that human have symbiotic-mutualism relationship with their environment. On the one hand, they were raised and influenced by their environment, and on the other hand they also play major role in maintaining and preserving the environment. Thus, human must be harmonious with their environment by not exploiting and destroying it. In turn, human awareness of ecology is expected to foster an attitude of ecological piety.

5. Conclusion

Based on linguistic analysis and contextual approach to the hadiths and key terms in it, it can be concluded that Islam from the beginning has introduced the concept of nature conservation, which includes:
1. Form of nature conservation: a) maintenance, preservation, and processing of land; b) protection and prevention

2. Understanding of those forms leads to motivation and responsible elements in conservation programs include: what, who, and how a) Motivation in preserving and conserving nature is the motivation of worship; b) about what is planted, the Prophet suggested to plant all kinds of trees and plants grown in the short and long term that serve as food producer and protection (nature reserve); c) who is involved in this task is human, both personally and institutionally; both private and public. As for d) about how this program can be done, it can be done through reforestation program (replanting the bare forests), revitalization of dead land through ihya ’al-mawat program, vegetable cultivation, and reserve (protection) of nature. The analysis of hadith above portrays synergistic and balanced relationship between subject and object; between religious production and consumption activities.

References


