## Maqasid al-Shariah in Environmental Conservation of Yusuf al-Qardawi's Perspective

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Abstract: This study explores the thoughts of Yusuf Qardawi about environmental sustainability in an Islamic perspective on the Maqasid al-Shariah (Objectives of Shariah), then will be linked to environmental issues in Indonesia. Yusuf al-Qardawi composes his thoughts on environmental conservation by normative approach. He offers actually the environmental preservation is part of the values contained in protection of the religion, protection of life, protection of intelect, protection of lineage / progeny, and protection of property / wealth. The issue has not to be studied yet in depth.

### **1 INTRODUCTION**

Among the interesting issues that attract the attention of muslim intellectuals and scholars are environmental problems. there are many conferences, seminars and meetings are held locally and internationally. It aims to find ways to conserve the clean and healthy environment (al-Ba'zawi, 2018). The modern world has led to the culmination of science in the 17th century (Russel, 2002). The presence of modern science with its success by uncovering, and controlling the natural world (especially through the developed technology) has raised serious challenges to religious beliefs and traditional cultural arrangements. Advancement in the field of science and technology have a positive and negative impact on human life and environment (Rahmi, 2015). The nature or environment is very influential for human survival, because humans interact with their environment (Marsit, 2015).

Yusuf al-Qardawi is a contemporary mujtahid at the end of the 2nd millennium that contributed a lot in the fields of science, thought, da'wah, education and others. He always tries to spread the teachings of Islam. In his capacity as a scholar who cares for the environment, he devotes a lot of his thoughts on the environment in a work entitled Riayah al-Biah fi al-Shariah al-Islamiyah. Next, al-Qardawi explains in his book that maqasid al-shariah which focuses so far on five primary human, actually has a close connection with environmental issues (Baroudi, 2016), which means that there is an important role for Islam in preserving the environment (Darwish, 2017). Starting from here the writer is interested in studying it in more depth, in order to format a concept of environmental conservation that is based on religion taken from the values of the Koran and Hadith. The author tries to formulate what is the main problem in this paper:

1. How is the concept of maqasid al-shariah in environmental conservation according to al-Qardawi?.

2. What is the relevance with the current efforts to overcome the environmental crisis?

This paper consists of six discussions, wich consists of introduction, analytical framework, literature review, research methodology, discussion, and conclusions.

#### **2** THEORETICAL FRAMEWORK

#### 2.1 The Magasid al-Shariah Concept

Not all ulama explain it explicitly, such as imam al-Shathibi who did not discuss the definition for maqasid al-shariah (al-Raishuni, 1992). Similarly, there is no understanding of maqashid syari'ah according to ushuliyyun and others from the *mutaqaddimin* (classic scholars). However, we can

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find the understanding of maqasid al-shariah from some of the scholars of *mutaakhkhirin* (contemporary scholars) whom explain the understanding of maqas}id al-shariah. Among them is Muhammmad Thahir ibn 'Ashur ('Ashur, 1998) Wahbah al-Zuhaili (al-Zuhaili, 2006) and 'Alal al-Fashi (al-Fashi, 1963). They give maqasid al-shariah understanding with different expressions. But if understood, the meaning in the phrase is with the same intent, which is about purpose of Islamic law.

#### 2.2 Environmental Sustainability

Environmental sustainability can be defined as a condition of balance, resilience, and interconnection that enables human society to meet its needs while not exceeding the capacity of its supporting ecosystem to continue to regenerate the services needed to meet those needs and by reducing biodiversity (Morelly, 2011). In this case, the author associates it with sea wealth that must be maintained.

#### 2.3 Microplastics

Plastic is the most prevalent type of marine debris found in our ocean and Great Lakes. Plastic debris can come in all shapes and sizes, but those that are less than five millimeters in length (or about the size of a sesame seed) are called "microplastics" (National Oceanic and Atmospheric Administration, 2018).

Microplastic interacts with biota, including microorganisms, in these habitats, raising concerns about its ecological effects (Cormick, 2014).

In terms of production, thermoplastic production has grown rapidly since the commencement of largescale production around the 1950s, reaching 322 million tons / year in 2015 and 335 million tons / year in 2016 (Plastics Europe, 2017).

#### **3** LITERATURE REVIEW

After Maqasid al-shariah was widely studied like al-Ghazali or others (al-Ghazali, 2008) (al-Qardawi, 2001), than developed in Shatibi's era (al-Shatibi, 1997), that focused on five things. In the next of time, maqasid al-shariah gets much attention now. In addition, a lot too used in various fields of human life, such as politics, economics (Norashikin, Mohd Shukri, 2018). So it is important that this article made to study the maqasid al-shariah which discusses the environment. In this case the author chose al-Qardawiwho is quite representative in the world of Islam.

## 4 RESEARCH METHODOLOGY

This research is a library research, studying al-Qardawi's thought about maqasid al-shariah in environmental conservation. This type of data includes qualitative data (Lexy. J Meleong, 2004) as the primary data source in this study is al-Qardawi book by title: riayah al-biah fi al-shariah alislamiyah and other sources related to this paper, as a secondary data source.

This research approach uses content analysis (Krispendoff, 1993) by means of data collected, recorded, classified, read, understood, dan cited last drawn conclusions. Because this article departs from concepts based on syara texts. After all data have been collected, then it is classified according to the category of problems.

## 5 DISCUSSION

Environmental sustainability in the perspective of al-Qardawi is always in sync with the objectives of the shariah (maqasid al-shariah) (Salamah, Muhammad Khalaf, 2016), because the aim of upholding the Islamic Shariah is to protect religion, life, intelect, lineage, and wealth, known as aldaruriyat al-khams. The experts of usul al-fiqh mentioned these five things as basic human needs (al-Qardawi, 2001).

Environment is a sphere in which humans live, humans live in it, both when traveling and seclusion. As a place he returns, whether in a willing or forced state (Murtadha, 2007).

In the Qur'an it is explained that humans were created as caliphs on earth. The obligation of humans as caliphs on earth is to maintain and take care of the earth and everything in it to be managed properly. In this case the Caliphate as the duty of Allah to take care of the earth must be carried out in accordance with the will of its creator and the purpose of its creation (Nasution, 1992).

The purpose of Allah makes sharia is to preserve human benefit, while at the same time avoiding

damage both in the world and in the hereafter. The classical scholars have discussed such as al-Shatibi in his book by title al-Muwafaqat. He divided the purpose of Islamic law (maqashid al-shariah) into five things as mentioned above. A contemporary scholar like Yusuf al-Qardawi develops ideas about maqashid al-shariah that every part of five things in maqashid al-shariah has important value in the form of important concern about environmental sustainability.

# 5.1 Environmental Conservation in Magasid al-Shariah

Furthermore, the application of primary needs (al-daruriyah) is a fundamental need that is related in realizing and protecting the existence of the five main aspects mentioned above (Saifuddeen, et al., 2014). If this benefit is lost, then human life can be destroyed, not saved, both in the world and in the hereafter (Zaidan, 2018).

It is not a skeptic that preserving the environment included parts of the five basic human needs (al-Kailani, 2014). In other side, the maqasid al-hariah in general are to get benefit, and minimize damage with all ability, also punish halal for all good and contain benefits, as well as punish haram for all that contains haram. From here, it appears that al-Qardawi tried to establish an environment-based fiqh (Ghufron, Saharudin, 2007).

The offer of al-Qardawi from usul fiqh view on environmental preservation can be manifested in two ways; curative (ijabi) and preventive (salbi). Curative by maintaining existing existence, while preventive by taking preventive steps to avoid unwanted damage (Fre, 2018).

More detail, maqasid al-shariah on environmental conservation is protection of the environment is a part of the values in realizing all five basic elements of primary needs. Than, al-Qardawi formulates the values implied in maqasid al-shariah related to the protection of the environment, that is the existence of humans as khalifah can carry out its role and function as the earth's prosperity not the ruler earth. His several principles of environmental conservation in maqasid al-shariah are:

1. Protecting the environment is part of protecting of the religion.

Doing damage to the environment causes the elimination of the essence of true piety in religion, damaging human functioning on earth (Salamah, Muhammad Khalaf, 2016), and violates God's commands to humans related to God's creations around him.

The most important of these goals is safeguarding religion by establishing agreed upon pillars, and leaving the agreed upon prohibited things. And protecting religion in this sense is closely related to the elements of environmental management created by God, and God takes it to the benefit of His servants and God wants it to continue, and warns of efforts to break it or attempt to destroy it. If people thank God for the blessings of Allah, Allah adds goodness in the world and in the hereafter, and if they do transgressions and do damage then Allah removes blessings. the form of gratitude for the gift is to make good use of it, maintain balance, and be careful not to damage or change authenticity :) as explained in the Qur'an Surah al-Rum Verse 41.

2. Protecting the environment is part of protecting of the life.

Health, safety, good life, maintenance of rights (al-Khayat, 2004) is a reflection of the protection of the life. While damage to the environment, pollution, diminishing resources, environmental balance disruptions can threaten the life cycle. The Qur'an describes important values in the human life, the sanctity of living in pre-Islamic religions in Surah al-Ma'idah, chapter 5, verse 32 (Kashir, 1999). The verse illustrates that the person who belittles the soul as if he underestimates all other souls, because there is no difference between souls and each other.

Islam pays attention to the right to life, because life is a gift from Allah, and it is not allowed to violate it, and the nation as a whole is a necessity for rulers to pay attention to matters relating to the people, especially the maintenance of the soul and provide an environment suitable for health.

3. Protecting the environment is part of protecting of the lifeintellect.

Allah created human reason as a differentiator from animals. In general, preserving the environment is protecting people with all their existence comprehensively; including body, mind and others. Individuals who don't take care of their environment are such as those who lose their minds, not maintained by their thoughts. Allah often reminds in the Qur'an with the editor "afala ta'qilun" (then will you not reason?). The preservation of reason has an important position in Islam (Rane, 2012), this can be seen from the punishment for khamr drinkers. Because they eliminate the reason, and cannot distinguish positive and negative things (Lyvers, et al., 2018).

Protecting of the intellect is important, because the protection of mind cause of religious obligations. It is scientifically proven that radioactive contamination and sound pollution have a serious and direct effect on the brain cells and may cause disease. It is scientifically proven that radiation pollution and sound pollution have a serious and direct effect on brain cells. It can also be more quickly affected by the Alzheimer's disease. Alzheimer's disease is a condition that is characterized by a decrease in memory, decreased ability to think and speak, and behavior changes in patients due to disorders in the brain that are progressive or slowly he quickly gets heat disease can also be more quickly affected by the disease.

4. Protecting the environment is part of protecting of the lineage.

Humans develop by breeding (Gould, 1994). The existence of human life on earth is the will of Allah. The natural wealth that exists not to be enjoyed alone, but is also prepared for the next generation. Damaging the environment means taking away their rights. The current generation is obliged to preserve its environment as a form of responsibility (Brown, 2017).

Protecting generations is part of descent conservation, human honor and noble descent. to fulfill this goal in order to achieve a goal, careful preparation is needed to face the striking challenges of earth destroyers and environmental polluters that have been created by Allah, human cloning, enabling homosexual marriages and so on are serious challenges to ecological balance. The Holy Quran considers the destroyers of the earth to have changed their provisions in the creation of Allah.

5. Protecting the environment is part of protecting of the property.

In this life Allah creates wealth as a support for life. Assets are not always cash or gold and silver. Earth, trees, plants, animals, water, oceans (Abbott, et al., 2014) and others are assets that must be protected. Protection of the environment obliges to preserve it in all forms and kinds of property from damage, also hand clean air, water and land are the main contributors to the quality of life in every society (Turner, et al., 2016). So maqasid al-shariah here is to protect natural resources, increase productivity, provide good consumptive direction and distribution (al-Qardawi, 2001).

Protecting property is a goal that needs to be carefully guarded because of its close relationship with environmental protection and the preservation of its capabilities. Islam is legally obliged to seek halal (permissible) money from the right ways according to Islamic religion, and spend it on himself and his family without reproach or wasteful. Islam does not justify eating other people's property except in the right way and obtaining permission for the owner. The word "property" refers to all his wealth: land, livestock, animals, trees, cash, etc., such as what can be used, such as fish in water, birds in the air, animals that are not tamed and what can be obtained, air, light and so on. Islam regulates the use of God's creation in the universe in a balanced manner without reducing or excessive, so it does not violate the rights of future generations and deplete some of the natural resources available for the environment.



Figure 1 Process by the Author

From the picture above explains that the hifdhul biah (protection of the environment) protects the five of al-Dharuriyat (the five necessities).

#### 5.2 Relevance of Environmental Conservation thought of Yusuf al-Qardawi in the Concept of Maqasid al-Shariah for Environmental Crisis Management in Indonesia

Since the 1960s in Indonesia, attention to the environment has been widely discussed in the media. One of the historical records of the environment in Indonesia is the National Management and Development Management Seminar held by Padjadjaran University in Bandung on 15-18 May 1972. In Indonesia the seminar was the first seminar held with the theme of the environment (Soemarwoto, 2001). One of the highlights of the 1973 seminar was a maritime problem (Keraf, 2010). This shows that Islamic societies in Indonesia uphold their religious teachings. In accordance with the above thoughts, Ali Yafie is a Jurist in Indonesia affirming that the quality of one's faith can be measured, one of which is the extent to which the person's sensitivity and concern for environmental sustainability (Yafie, 2006).

To clarify the description of environmental issues in Indonesia, the authors limit the marine ecosystem in Indonesia.

There are many studies and reports show that ocean ecosystem are being disrupted and depleted with serious consequences. Pollution, habitat loss, overfishing, pollution, climate change ocean acidification introduction of non-native species are serious threats (Portman, Michelle E. Daniel Nathan and Noam Levin, (2012).

One study shows about 300 million tons of plastic is manufactured every year, and between 5 and 13 million tons of it ends up in the ocean. This study calculate that 275 million metric tons (MT) of plastic waste was generated in 192 coastal countries in 2010, with 4.8 to 12.7 million MT entering the ocean. there are two things that affect which countries largely contribute the greatest mass of uncaptured waste available to become plastic marine debris. Those are population size and the quality of waste management systems. According to this study, management infrastructure Without waste improvements, the cumulative quantity of plastic waste available to enter the ocean from land is predicted to increase by an order of magnitude by 2025 (Jambeck JR, et al., 2015). In other side, Thompson's laboratory predicts that plastic manufacturing will rise steadily to 33 billion tons by 2050 (Alla Katsnelson, 2015).

Marine wealth is something that must be maintained together (Rohling, E.J., 2017). The sea has an urgency for life, if its potential is explored, the sea can prosper the human race (Stark, Julian Barbiere, 2018). There are many history record of the sea has often been used as a commercial route, even the history of the development of Islam in nusantara is inseparable from discussions about maritime (Azra, 2014). The Countries that are far more advanced also pay high attention to the sea. As UK prioritizes sea control, especially the commercial lines such as Giblartar. Malta. and others (Cox, 2015), The Dutch with their naval warfare tried to control the road through South Africa, Ceylon, Jakarta and Ambon (Sanderson, 2008), and the United States after applying the theory of sea control turned into imperialism trying to control the Caribbean, Alaska, Panama, Hawai, the island of Guam, Japan and the Philippines (Morton, 2014). In addition, the sea has abundant natural resources, such as oil, natural gas, fisheries, and tourism (Schwerdtner, et al., 2014).

Indonesia has 17,499 islands from Sabang to Merauke. The total area of Indonesia is 7.81 million km2 consisting of 2.01 million km2 of land, 3.25 million km2 of ocean, and 2.55 million km2 of Exclusive Economic Zone (EEZ), so from that data, the sea area is 64, 97% of the total territory of Indonesia (Roza, 2017: Ministry of Marine and Fisheries of The Republic of Indonesia, 2011).

In the 1945 Constitution article 33 paragraph (3) states that the earth and water and the natural resources contained therein are controlled by the state and used for the prosperity of the people (The Constitution of the Republic of Indonesia of 1945, Article 33 Paragraph 3). Then, clarified by law No. 32 of 2014 concerning marine affairs (Law of the Republic of Indonesia No. 32 of 2014 About the Sea), as a legal law for regulating Indonesia's marine use comprehensively and integrated. Therefore, the role of government (government will) is needed to be able to maintain and process marine wealth and potential in Indonesia (Biliana, Robert, 1998).

The Indonesian Sea, which has a wide range of functions and wealth, must confront diametrically and frontally with the threat of damage to marine ecosystems which from time to time become more apparent and difficult to contain. These threats, including microplastic (Gabriel, Barbara Carolina, 2015: Sul, Monica F.Costa, 2014), which is in sea water. Currently, according to M. Reza Cordova (Researcher of the Indonesian Institute of Oceanography Research (P2O) Research Institute (LIPI), that microplastic in Indonesian seawater is quite large, ranging from 30 to 960 particles / liter. This amount is equal to the number of microplastic found in the seawater of the Pacific Ocean and the Mediterranean Sea, and Indonesia was recently ranked second as the largest plastic waste producer in the world. The influence of microplastic can occur on marine biota, the environment, and on human health. Microplastic presence in the sea of Indonesia is like a threat that at any time damages the ecosystem like in Aceh sea, Riau Islands, Jakarta, West and East Java. Then, in areas of Eastern Indonesia such as Bali, Southeast Sulawesi, North Sulawesi, and Maluku (Cordova, A'an J. Wahyudi, 2016).

Piles of garbage, especially from microplastic on the coast, are recognized as a threat to marine biota and threats to the marine environment (Cordova, M. R., Hernawan, U. E., 2018). Rather, the human health also becomes threatened if it enters the human body (Cole, et al., 2015), because the microplastic content is difficult to decompose (Prata, 2018).

In Indonesia, the role of parents is important to teach their children to take care of the environment and the teachers in schools in Indonesia teach students from childhood to throw garbage in its place. what has been taught by the teachers and parents about disposing of garbage in its place will create a beautiful, clean and healthy environment. Waste that is scattered uncomfortable is seen as having the potential to invite disease and potentially invite natural disasters. For example, one of the causes of the flood disaster is the obstruction of the waterway by the amount of blockage from garbage that is not disposed of in its place. Another reason is the reduced ability of the soil to absorb rainwater due to various causes, one of which is due to the large amount of waste that cannot be decomposed like plastic waste. In fact there is another way that can be done to protect the environment to avoid the impact of waste that is sorting and processing waste. Garbage is generally divided into two, the first is organic waste which is indeed produced from natural ingredients and rapidly decays such as leaves, vegetables, and food scraps. The second type of waste is non-decaying, categorized as non-organic waste, for example plastic, tin, glass, and others. Plastics need to 100 to 400 years to break down at the landfill (U.S. Environmental Protection Agency, 2016).

About garbage designated by the hadith with the statement: "Allah thank the person who got rid of the tree that was blocking itthe way, and put that person into heaven" (Hanbal, 2009). Getting rid of rubbish is a priority, because there is another hadith which explains that removing rubbish is included in one branch of faith. Faith has many branches, the top of which is the tauhid sentence, and the bottom one is throwing garbage from the streets. Even though its position is called the bottom, but it remains in the box of faith, while the position of faith in Islam is very important, because it is the foundation of Islam itself.

When Islam came, Islam affirmed the prohibition of doing damage on the face of the earth with various exposures. Among these are those that strictly prohibit doing damage, Allah says that in surah al- Qasas verse 77. This is confirmed again to humans that Allah SWT really does not like humans who do damage in this world. In this case, Allah says in surah al-Maidah verse 64. Islam educates every Muslim to interact well with their surroundings. That is also mentioned in a Hadith narrated by Muslims from Shadad bin Aus, The propet Muhammad says: "surely Allah obliges to do good for everything" (al-Qardawi, 2001). It means Allah requires that in truth. Then also mentioned that Allah has establish affection for Himself, this can be seen in surah al-An'am verse 54.

As a result of this environmental damage, it has a very negative impact on the sustainability of human life in this world which leads to misery and pain. if needed humans need to reflect on the message of Muhammad Al-Ghazali in his book "Jaddid Hayatak" (Renewing Your Life) which states that changing life must first grow in the soul itself before everything else. All forms of restraint in carrying out renewal in life and improvement in your life are nothing but apart from extending gray times that you yourself want to break away from and remain in defeat in the face of neglect and futility (al-Ghazali, 2005).

Islam is the religion of all prophets and messengers, from Adam to Muhammad which was revealed by the The Holy Quran to him as the guidance of humanity to reach happiness in the world and the hereafter. He was decided to the world as a mercy for all nature and improve human morals. Islam as a religion for all humanity with its main source al-Quan and Hadith is very much concerned about the environment so that Islam equates the preservation of the environment as well as maintaining religion, soul, lineage, reason and wealth. Islam strongly condemns those who make damage on the face of the earth. Allah explain this idea in al-Maidah verse 33. So, to live and live sustainably, humans must learn to understand their environment and be able to regulate the use of natural resources in a way that is accountable for the security and preservation of this nature.

In Islam it is known as Ihsan (friendly / kind) which means protecting and maintaining it perfectly. Such a definition can be found in the famous Hadith of Gabriel that Ihsan is "You must worship God as if you see him, and if you do not see Him, then He sees you. Ihsan also means paying attention, loving, and respecting. Such as those mentioned in the word of Allah Almighty in surah An-Nisa verse 36. The two definitions above are in fact needed in the context of interaction with the environment. Because, indeed humans must treat the environment by protecting and protecting it. It is not even human beings who underestimate, neglect, and destroy. In addition, humans must treat the environment in a friendly, caring and compassionate manner (al-Qardawi, 2001). This is as the friends of the Prophet Muhammad implement in their lives. Like Abu Bakr when he wanted to send his troops to Sham under the leadership of Yazud bin Abi Sufyan, he advised Yazid ten things so that in the war do not kill babies, women and elderly people, do not cut fruit trees, do not burn buildings, do not slaughter livestock except to eat, do not destroy date trees, do not burn date tree, don't betray and don't be afraid. Likewise, Umar bin Khattab, when he saw a horse carrying a cargo that was beyond its limits, then he called a freightman then snapped him for his actions.

Yusuf al-Qardawi in his work entitled Riayah al-Biah fi al-Shariah al-Islamiyah which is translated into Islam Environmentally Friendly Religion with Indonesaia language explained that protecting the environment included *maqasid al-shariah*. Safeguarding the environment is the same as keeping religion (hifddiin) because it is stated in the word of Allah surah Al-A'raf verse 56. al-Qardawi also explained that protecting the environment is as important as protecting the religion, life, intellect, lineage, and property. Without a clean and healthy nature, achieving *maqasid al-shariah* which is five becomes impossible.

Thus, if it is associated with the thought of Yusuf al-Qardawi that the article 33 of the 1945 Constitution is not contrary to al-Qardawi's thinking about the importance of protecting the environment.

#### **6** CONCLUSIONS

*Maqasid al-Shariah* is a science that has developed like other sciences. This knowledge is the basis for all muslim treatment and being a machine that moves human activities in order to realize the public interest, it is to provide benefits and avoid damage to achieve Allah's pleasure.

Yusuf Qardawi's ijtihad results related to environmental conservation through magasid alshariah become relevant as a problem solving in the thick of the current variety of global environmental issues and crises. In Indonesia for example, the destruction of nature in various forms, which is then accompanied by its impact in the form of natural disasters, whether it is realized or not has threatened human survival. Therefore, with the principles of environmental conservation derived from the values of religious teachings, as initiated by al-Qardawi, it is expected to foster awareness of the human mindset the importance of maintaining natural existence. With the maintenance of natural existence, it means also to realize the fifth values of dharuriyat al-khams; that is, protecting of the religion, the life, developing a level of positive thinking and minimizing negative thinking, preparing the future for future generations, maintaining a balance between human endeavor and matter in terms of owning, transacting and avoiding damage.

#### REFERENCES

- 'Ashur, I., (1998), Maqasid al-Shariah Al-Islamiyah, Dar al-Basair, Saudi Arabia.
- al-Ba'zawi, Mustafa, 2016, Presentation text of promotion session for doctoral dissertation at friday, under title "Fiqh al-Bi'ah fi dau' al-Maqasid al-Shariah min Khilal Nawazil al-Magrib al-Islami". https://diae.net/22987/. last accessed 2018-09-27.

- al-Fashi, A., 1963, *Maqasid al-Shariah Al-Islamiyah wa Makarimuha*, Maktabah al-WIhdah, al-'Arabiyah , Morocco.
- al-Ghazali, 2008, *al-Mustasfa*, 1<sup>st</sup> ed, Chapter II, al-Madinah al-Munawwarah. Jeddah.
- al-Ghazali, M., 2005, *Jaddid Hayatak*, 9<sup>st</sup> ed, al-Nahdah Misr. Cairo.
- al-Kailani, Sari Zaid, 2014, Tadabir Riayah al-Biah fi al-Shariah al-Islamiyah, *The University of Jordan*, 41 (2): 1209 – 1228.
- Al-Khayat, 2004, *Health as a Human Right in Islam*, World Health Organization Regional Office for the Eastern Mediterranean. Cairo.
- al-Qardawi, 2001, *Riayah al-Biah fi al-Shariah al-Islamiyah*, 1<sup>st</sup> ed, Dar al-Shuruq. Cairo.
- al-Raishuni, A.,1992, Nazhariyyat al-maqashid 'inda alimam al-Syathibi, al-Mussasah al-Jami'ah li Dirasat wa al-Nushur wa al-Tauzi'. Libanon.
- Al-Shatibi, 1997, *al-Muwafaqat*, 1<sup>st</sup> ed, Chapter II, Dar Ibn 'Affan. Saudi Arabia.
- Al-Zuhaili, W., 2006, UsHul al-Fiqh al-Islami, Dar al-Fikr, Damascus.
- Azra, Azyumardi, 2014, Jaringan Ulama Timur Tengah dan Kepulauan Nusantara Abad XVII & XVIII: Akar Pembaruan Islam, Prenada Media Grup. Jakarta.
- Baroudi, Sami E., (2016), The Islamic Realism of Sheikh Yusuf Qardawi (1926–) and Sayyid Mohammad Hussein Fadlallah (1935–2010), British Journal of Middle Eastern Studies, 43: 94–114.
- Biliana, Robert, 1998, Integrated Coastal and Ocean Management: Concepts And Practices, 4<sup>st</sup> ed,: Island Press. Washington, DC.
- Brown, Edith, (2017), Our Rights and Obligations to Future Generations for the Environment, *The American Journal of International Law*, 84: 198-207.
- Clare, Stark and Julian Barbiere, (2010), *Healthy Ocean Healthy People*, Ministry of Foreign Affairs of Denmark. http://www.unesco.org/new/en/rioplus20/. last accessed 2018-10-9.
- Cole, Matthew, et al., (2015) The Impact of Polystyrene Microplastics on Feeding, Function and Fecundity in the Marine Copepod Calanus helgolandicus," *Environental Science and Technology*, 49 (2): 1130– 1137.
- Cordova, M. R., and A'an J. Wahyudi, (2016), Microplastic in the Deep-Sea Sediment of Southwestern Sumatran Waters," *Marine Research In Indonesia (MRI)*, 41: 27-35.
- Cordova, M. R., Hernawan, U. E., (2018) Microplastics in Sumba Waters, East Nusa Tenggara, *IOP Conference Series: Earth and Environmental Science*, 162 : 1-8.
- Cormick, A. Mc., et al., 2014, Microplastic is an Abundant and Distinct Microbial Habitat in an Urban River, *Environ. Sci. Technol*, 48 (20): 11863–11871.
- Cox, Sebastian, 2015, British Strategy in a Certain Eventuality, in Air Power Review, Gp Capt Paul Wilkins, Eds.: 12-40. Britain.
- Darwish, Salih, 2017, Daur al-Shariah al-Islamiyah fi Himayah al-Biah, published in the book of the

Fifteenth International Conference of the Center for the Generation of Scientific Research on Environmental Protection Mechanisms, held in Tripoli, Lebanon on 26 and 27 December.

- Environmental Professionals, *Journal of Environmental* Sustainability: 1: 1-9.
- Fre, Zeremariam, 2018, Knowledge Sovereignty Among African Cattle Herders, UCL Press. London.
- Gabriel, Luis, Barbara Carolina, (2015), Microplastics in the marine environment: Current trends and future perspectives, *Marine Pollution Bulletin*, 97 (1-2): 5-12. See also Sul, Juliana A.Ivar do, Monica F.Costa, (2014) The present and future of microplastic pollution in the marine environment, *Environmental Pollution*, 185: 352-364.
- Ghufron, A. and Saharudin, (2007), Islam Dan Konservasi Lingkungan, *Millah*, 6 (2): 56 75.
- Gould, Stephen Jay, (1994) The Evolution of Life on the Earth, *Scientific American*, 271: 84-91.
- Hanbal, A. B., 2009, Musnad al-Imam Ah}mad bin Hanbal, Muassasah al-Risalah. Cairo.
- Jambeck JR, et al. (2015), Marine pollution. Plastic waste inputs from land into the ocean. *Science*, 347:768–771.
- Joshua Abbott, et al., (2014), Steering the Global Partnership for Oceans, *Marine Resource Economics*, 29 (1): 1-16.
- Kashir, Ibn, (1999), *Tafsir al-Quran al-Azim*, Chapter III, Dar al-T}ayyibah. Saudi Arabia.
- Katsnelson, A., (2015), Microplastics present pollution puzzle: Tiny particles of plastic are awash in the oceans—but how are they affecting marine life?, In *Proceedings of the National Academy of Sciences of the United States of America*, 112 (18): 5547-5549. 120, New York, Ny, USA. ACM.
- Keraf, A. S., 2010, *Etika Lingkungan Hidup*, Penerbit Buku Kompas. Jakarta.
- Klaus Krispendoff, 1993, Analisis Isi Pengantar Dan Teori Metodologi, Rajawali Press. Jakarta.
- Law of the Republic of Indonesia No. 32 of 2014 About the Sea. http://djpsdkp.kkp.go.id/public/upload/files/1uu-32-2014.pdf. last accessed 2014-12-9.
- Marsit, Carmen J., (2015), Influence of environmental exposure on human epigenetic regulation, *The Journal* of *Experimental Biology*, 218:71-79.
- Meleong, Lexy. J., 2004, *Metodologi Penelitian Kualitatif*, Remaja Rosdakarya. Bandung.
- Michael Lyvers, et al., (2018), Alexithymia in Relation to Alcohol Use, Emotion Recognition, and Empathy: The Role of Externally Oriented Thinking, *The American Journal of Psychology*, 131 (1): 41-51.
- Morelly, J., (2011), Environmental Sustainability: A Definition for
- Morton, Louis, (2014), United States Army in WWII the Pacific - Strategy and Command: the First Two Years, Verdun Press. France.
- Murtadha, (2007), Islam Ramah Lingkungan, Islam Futura, 6 (2): 61-69.
- Nasution, H., 1992, *Ensiklopedi Islam Indonesia*, Djambatan. Jakarta.

- National Oceanic and Atmospheric Administration, 2018, *What are microplastics?*, *https://oceanservice.noaa.gov/facts/microplastics.html #transcript.* last accessed 2018-10-9.
- Norashikin, A., Hanapi, M. S., (2018), Maqasid Al-Syariah Thought in Mainstream Islamic Economics: A Review, International Journal of Academic Research in Business and Social Sciences, 8 (4): 626 – 636.
- Portman, Michelle E. Daniel Nathan and Noam Levin, (2012), A Regional Perspective for Marine Conservation in the Mediterranean Sea, *Ambio*, 41 (7): 670–681.
- Prata, Joana, (2018), Airborne microplastics: Consequences to human health?, *Environmental Pollution*,Vol. 234: 115-126.
- Plastics Europe, 2017. An Analysis of European Latest Plastics Production, Demand and Waste Data; Plastics Europe: Association of Plastic Manufacturers. Brussels, Belgium,
- Rachel A. Turner et al., (2016), Trust, confidence, and equity affect the legitimacy of natural resource governance, *Ecology and Society*, 21 (3): 1-16.
- Rahmi, (2015), Konsep Konservasi Lingkungan Hidup Tinjauan Maqashid al-Syari'ah Sebagai Jawaban Dari Krisis Lingkungan Hidup. Unpublised, Thesis of UIN Sultan Syarif Kasim Riau.
- Rane, Halim, (2012), The Relevance Of A Maqasid Approach For Political Islam Post Arab Revolutions, *Journal of Law and Religion*, 28: 489-520.
- Rohling, E.J., (2017), *The Oceans: a Deep History*, Our Oceans, a Treasure in Need of Protection, Press Princeton University Press, Woodstock, U.K. London.
- Roza, Elviana, (2017), Maritim Indonesia, Kemewahan Yang Luar Biasa, ministry of marine and fisheries of the republic of indonesia, https://kkp.go.id/artikel/2233-maritim-indonesiakemewahan-yang-luar-biasa last accessed 2018-10-9. See also (2011) ministry of marine and fisheries of the republic of indonesia. http://statistik.kkp.go.id/index.php/arsip/file/37/kpda1 1 ok r06 v02.pdf. last accessed 2018-10-9.
- Russel, B., (2002), Sejarah Filsafat Barat, Pustaka Pelajar, Yogyakarta.
- Saifuddeen, Shaikh Mohd, et al., (2014), "Maqasid al-Shariah as a Complementary Framework to Conventional Bioethics", *Science and Engineering Ethics*, Vol. 20: 317–327.
- Salamah, Bani, Muhammad Khalaf, (2016), Protecting Environment and Limiting Climate Changes in Islamic Jurisprudence, *Dirasat: Shari'a and Law Sciences*, Vol. 43: 817-832.
- Sanderson, (2008), *South Asia 1800-1950*, World Peace Communications. Goleta, California.
- Schwerdtner, Kathleen, et al., (2014), The Future of the Oceans Past: Towards a Global Marine Historical Research Initiative, *Plos One*, 9 (7): 1-10.
- Soemarwoto, O., (2001) Ekologi, Lingkungan dan Pembangunan, Djambatan. Jakarta.
- The Constitution of the Republic of Indonesia of 1945, Article 33 Paragraph 3.

- U.S. Environmental Protection Agency, (2016), *Environmental Factoids*, https://archive.epa.gov/epawaste/conserve/smm/waste wise/web/html/factoid.html. last accessed 2018-10-9.
- Yafie, A., (2006), *Merintis Fiqh Lingkungan Hidup*, Ufuk Press. Jakarta.
- Zaidan, Abd al-Karim, (1965), *Riayah al-Maslahah fi al-Shariah al-Islamiyah*, http://drzedan.com/content.php?id=137. last accessed 2018-10-12.