



INTRODUCING ECOLOGICAL ISLAMIC BOARDING SCHOOL

Inayatul Maula¹, Zainuddin², Muhammad Solehuddin³

Institut Agama Islam Darullughah Wadda'wah Bangil¹, Sekolah Tinggi Ilmu Syariah Miftahul Ulum Lumajang², Institut Agama Islam Darullughah Wadda'wah Bangil³

Email: linplakat@gmail.com¹, zazaadiva@gmail.com²,
somuhammad822@gmail.com³

Abstract

The idea of ecological boarding school is actually not a new idea in the of Islamic boarding school. Islamic boarding schools as the oldest educational institutions in Indonesia are already familiar with ecological studies, both in the fields of interpretation of the Qur'an, Hadith, Fiqh, and the yellow book which become the basis of their knowledge. However, it is still theoretical and has not yet fully implemented. This study uses library research in the form of searching the latest books, books and journals. This paper concludes that it is time for Islamic boarding schools to transform their scientific treasures, especially those related to ecology, into a real movement. Islamic boarding schools must return to their identity as agents of social change by utilizing the scientific treasures, their

community and human resources they have by creating ecological boarding schools.

Keywords: *Idea, Islamic Boarding School, Ecology.*

Abstrak

Gagasan pondok pesantren ekologi sebenarnya, bukan gagasan baru di dunia pondok pesantren. pondok pesantren sebagai insitusi penidikan tertua di Indonesia sudah akrab dengan kajian-kajian ekologis baik itu alam bidang tafsir al Qur'an, Hadith, fiqh, mapun kitab kuning yang menjadi basis keilmuannya. Hanya saja kekayaan khazanah intelektual pesantren berkaitan dengan ekologis, hanya barau sampai pada wacana dan teoritik. Penelitian ini menggunakan riset pustaka berupa penulusuran kitab, buku dan jurnal terbaru.

Tulisan ini berkesimpulan bahwa sudah saatnya pondok pesantren mentransformasika khazanah keilmuannya terutama berkaitan dengan ekologis menjadi suatu gerakan yang real. Pesantren harus kembali ke jati dirinya sebagai agen perubahan sosial dengan

memanfaatkan khazabah keilmuan, basis komunitas dan sumber daya manusia yang dimilikinya dengan membuat pesantren ekologis.

Kata Kunci: Gagasan, Pesantren, Ekologi.

A. Introduction

The general public's view of Islamic boarding schools so far is more as purely religious educational institutions. Although many Islamic boarding schools have transformed into education that can compete with education in general, the image of Islamic boarding schools to produce ulama in the sense of religious experts (fiqh) is very dominant.¹ In other words, Islamic boarding schools are imaged only related to aspects of education and Islamic da'wah in a narrow sense, namely only limited to reciting the Qur'an, Hadith or "Kitab Kuning" which is the hallmark of Islamic Boarding Schools.

The view above is not entirely wrong, it's just not comprehensive enough to look at Islamic boarding schools. If viewed from a more complete perspective, Islamic boarding schools in their history have not only functioned as purely religious educational institutions. Pondok Pesantren is also a social and economic institution that partners with the surrounding community. This is what prompted the Kyai of Pondok Pesantren in 1983 to establish a non-profit and non-governmental non-governmental organization called P3M, short for the Association for Islamic Boarding School and Community Development. KH. Abdurahman Wahid (Gus Dur) is the main character behind this idea.²

Through this P3M, several Kyai with their own Islamic boarding schools have become *centers of excellence* who have the passion to develop social and economic

¹ Solihin Rusydi Kasdi, Iwan Setiawan, and Eliana Wulandari, "KINERJA PUSAT PELATIHAN PERTANIAN PERDESAAN SWADAYA BERBASIS PESANTREN DI JAWA BARAT," *Mimbar Agribisnis: Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis* 5, no. 2 (August 1, 2019): 304, <https://doi.org/10.25157/ma.v5i2.2285>.

² Slamet Untung, "GAGASAN ABDURRAHMAN WAHID TENTANG PENGEMBANGAN PENDIDIKAN PESANTREN (1970-1980)," *International Journal Ihya' 'Ulum al-Din* 18, no. 1 (September 7, 2017): 94, <https://doi.org/10.21580/ihya.17.1.1732>.

roles. As an education rooted in society, especially rural communities, Islamic boarding schools have a social responsibility to the community. From this reality, several Islamic boarding schools have developed their potential. Through *halaqah* activities with the community, P3M conducts management training, cooperatives, appropriate technology and other things that are beneficial for Islamic Boarding Schools and the surrounding community.

In the next process, several Islamic boarding schools have their own peculiarities in their economic development. For example, Pondok Pesantren Sidogiri, Pasuruan, East Java, under the label Sidogiri Network Forum (SNF), the economic and social development of Pondok Pesantren Sidogiri has grown into many subsidiaries with trillions of assets.³ Guluk-Guluk Islamic Boarding School in Sumenep, Madura with home industries, livestock, plantations, to cooperatives etc.⁴ Boarding School and Community Development Bureau-Maslakul Huda Islamic Boarding School (BPPM-PMH) by establishing a Savings and Loan Business Group.⁵ There are still many Islamic Boarding Schools that carry out similar activities.

Of the many Islamic Boarding Schools in developing their potential, only a few Islamic Boarding Schools have developed aspects of nature and the surrounding environment (Plantations, Rice Fields, Rivers, etc.). Even less, Islamic Boarding Schools that explicitly state as Islamic Boarding Schools that have a concern for ecological development. In fact, the number of Islamic boarding schools is more in rural areas than in urban areas. Nature is the main characteristic of rural communities. Culturally, Islamic boarding schools in rural areas in their lives always go hand in hand with the lives of rural communities. This means that this is an opportunity as well as a challenge on how Islamic boarding schools and the community should manage their nature and environment.

In a broader context, Indonesia is an agricultural country with quite rich ecological potential. Fertile land, rice fields, plantations, rivers, and other ecological potentials. Indonesia is also rich in types of plants. Be it secondary crops, tubers, fruits, herbs and other plants. Indonesia also has a climate that allows all ecological

³<https://www.gatra.com/detail/news/328110-Konglomerat-Bersarung-Sidogiri>

⁴ Achmad Faishal, "Bentuk-bentuk pengembangan ekonomi masyarakat di pesantren (studi kasus atas pengembangan ekonomi masyarakat di PP. Annuqoyah Guluk-guluk Semenep Madura)," August 14, 2012, <http://repository.uinjkt.ac.id/dspace/handle/123456789/24080>.

⁵Zubaidi, "MEMOTRET KETERLIBATAN BPPM PESANTREN MASLAKUL HUDA KAJEN DALAM AKSIPENGEMBANGAN MASYARAKAT," n.d., 20.

potentials to be developed properly. Some of the advantages possessed by ecology in Indonesia (nature, environment, seasonal cycles) are not widely owned by other countries in the world. However, these advantages are not utilized by the people in Indonesia, especially in rural areas.

Until today, there are quite a lot of poor people in rural areas.⁶ Not infrequently, productive lands owned by rural communities are controlled by capitalists (capitalists) who are then used by owners of productive land capital to make properties, buildings, *cottages* and other things that sometimes do not think about the socio-ecological aspects of the surrounding community. Socially, many productive rural communities have lost their livelihoods and have turned to cities. For those who do not get a job, it may justify any means to survive. Furthermore, an ecological anomaly occurs in Indonesia's climate anomaly. Uncertain seasons, if it rains there will be floods, if in summer there will be prolonged droughts and other anomalies.

Islamic boarding schools that were born and grew up in rural areas should take a role to save the ecology that is currently threatened. If in the pesantren's "*kitab kunig*" treasures it is taught "*hablum minallah*" with the application of *mahdah worship*, "*hablum minannas*" with the application of *deliberation* with humans, now is the time for Islamic boarding schools to also develop the "*hablum minal alam*" aspect by managing nature and the environment not only in the Pondok Pesantren environment. Specifically, but in the community where the pesantren was established. It's time for Islamic boarding school fiqh to move from the sky-high *fiqh of Akbar* to *grounded fiqh (environmental fiqh)* by initiating ecological boarding schools or developing ecology-based agriculture.

B. Method

This research method uses a qualitative *library research* approach, choosing a library research approach, because as far as researchers observe, there are quite a lot of writings related to ecological boarding schools, however, these writings are still in the form of "flakes" that are still scattered. Therefore, the researcher tries to combine and critically analyze these writings to become one more organized writing. Intellectual work carried out by researchers is in line with the notion of *library*

⁶ Data from the Central Statistics Agency recorded the number of poor people in Indonesia in 2019 reached 25.14 million people. Of this number, the number of rural poor reached 13.10 percent more than the urban poor reached 6.89 percent. See <https://www.bps.go.id/pressrelease/2019/07/15/1629/percentas>

research itself, as Nazir's view quoted by Milya Sari and Asmendri Asmendri , namely a process of collecting data by reviewing various literatures in the form of books, notes or reports related to the topic to be solved.⁷

Technically, in this library research, the researcher examines various library sources including research reports, information from the media, and other information related to Islamic boarding schools, ecology and economic development. The literature review was then combined and analyzed and the various libraries were critiqued so that the researchers concluded that they were more “original” writings.

C. Results And Discussion

a. Two Important Issues

This paper will examine two important issues, *first*, issues related to ecology with all its scope of problems. *Second* , issues related to economic independence. The two important issues are considered by the Islamic Boarding School as the basis and value in solving ecological problems and economic independence. In this context, initiating the Ecology Islamic Boarding School which is sourced from the “yellow book” treasures can be seen as a value that moves the Ecology Islamic Boarding School community in viewing the existing ecological and social problems. In summary, this paper will also emphasize that the treasures of the “Kitab Kuning” which contain a lot of ethical content can be implemented in more *real* actions , namely siding with ecological issues and issues of economic independence.

first issue , namely the ecological problem begins when there is a significant change called the industrial revolution. After James Watt, discovered the Steam Engine, various engines were developed using the basis of the Steam Engine: Ships, Trains, Cars and other industrial machines. Human power is replaced by machines. In addition, it also produces fuel that can be used to drive the engine. Humans started to use coal, oil and other natural energy sources that cannot be renewed.⁸In fact, if the natural resources run out, it takes millions of years to be renewed.

In addition, the accumulation of the population on this earth has experienced a tremendous surge. Because of this, the need for clothing, feed, and boards also

⁷Milya Sari and Asmendri Asmendri, “Penelitian Kepustakaan (Library Research) dalam Penelitian Pendidikan IPA,” *Natural Science: Jurnal Penelitian Bidang IPA dan Pendidikan IPA* 6, no. 1 (June 10, 2020): 44.

increases. At the same time people think practically. This means that people only think for a moment to get their wishes, ignoring ecological principles. In order to produce land productivity, people use chemical pesticides by ignoring the damage to the soil. Not only that, public awareness is also quite low regarding the preservation of nature. Many forests are cleared, rivers are polluted, littering and other damage is done. Ecosystems are damaged and weather anomalies occur. Floods, landslides, droughts, and natural disasters are logical consequences that humans must accept.

The second issue relates to economic independence. Economical, the economic independence of Islamic boarding schools and the surrounding community, especially in rural areas, is still very minimal. In rural areas do not have sufficient financial resources. Islamic boarding schools rely more on the personal money of caregivers. It is very difficult to collect fees from the students. Santri in Rural Islamic Boarding Schools are usually students who are economically disadvantaged. Likewise with rural communities, in general, they live with economic limitations.⁹ Rural communities only rely on natural resources that can be used to fulfill their livelihood.

The presence of Ecology Islamic Boarding Schools in partnership with the surrounding community by producing organic natural products can make the economy of Islamic Boarding Schools and local residents better. By utilizing social media, it is not difficult to market the organic products produced. In addition, ecological Islamic boarding schools can become a kind of "Ecotourism Islamic Boarding School" that can receive visits from various groups. By utilizing the natural atmosphere and organic products, it is possible for Ecology Islamic Boarding Schools to become *role models* for Islamic Boarding Schools that utilize ecological aspects as the basis for equitable economic development.

b. Different Perspectives on Ecological Issues

Industry first occurred in 1700 in England and quickly spread to parts of Europe, Russia, Japan and surrounding countries.¹⁰ In this era, a fundamental change began from an agrarian society to an industrial society. Many factories were established to produce various commercial needs required by consumers.¹¹ At this

⁹lihat "Fikih Sosial Kiai Sahal Mahfudh: Pengembangan Kemandirian Ekonomi Pesantren Dan Masyarakat Al-Mizan: Jurnal Hukum Dan Ekonomi Islam," 18, accessed November 29, 2019, <https://ejurnal.iiq.ac.id/index.php/almizan/article/view/37>.

¹⁰ Laura Levine Frader, *The Industrial Revolution: A History in Documents*, Pages from History (New York: Oxford University Press, 2006), 8.

¹¹Hal Marcovitz, *The Industrial Revolution*, 2014, 11, <https://www.overdrive.com/search?q=354F5D7D-33AF-4E48-8B60-5497B5798AF8>.

time human power began to be replaced by machine power. In addition, the scale of production has also increased many times over in a relatively short time.

According to Tovler as quoted by Armaidi Armawy, the industrial revolution is marked by the conquest of nature by humans, the use of *non -renewable natural resources in a blind distribution*, the use of giant machines to replace human labor and the production of certain goods in large quantities.¹² This exploitation of nature then destroys nature itself. Because the principle in the development of the industrial revolution is not for human needs, but for human wants. In addition, the spirit of industrial revolution is the spirit of economic capitalization to reap maximum profits.

In the context of Indonesia, the industrial revolution has mostly sacrificed the lower class. Many factories exist by sacrificing the ecological aspect. Some productive lands are converted into industrial lands and sometimes also ignore urban planning and the environment. The victims are again the lower class. Indonesia has also experienced a “green revolution”, namely changes in agricultural practices using chemical pesticides with predetermined seeds. The green revolution is more about "colonization" of developed countries by forcing developing countries to use specified seeds, fertilizers and pesticides. In some areas, the green revolution caused people's dependence on chemical fertilizers and pesticides as well as causing the loss of local rice varieties.¹³

Now the industrial revolution is moving towards the industrial revolution 4.0. Revolution 4.0 itself is a knowledge revolution marked by digitization, automation, and the increasing use of information technology.¹⁴ If the 1st industrial revolution was marked by the invention of the steam engine, the 2nd industrial revolution was marked by the utilization of electrical energy and the 3rd industrial revolution was marked by information technology innovation (computerization). Now the industrial revolution is being enhanced by digital technology. The development of innovation continues to move without being able to stem it. Because of these tremendous

¹² Armaididy Armawi, “DARI KONSUMERISME KE KONSUMTIVISME (Dalam Perpektif Sejarah Filsafat Barat),” *Jurnal Filsafat* 17, no. 3 (March 17, 2017): 315, <https://doi.org/10.22146/jf.23090>.

¹³ Firizky Farawita, “Degradasi Ekologi dan Kapitalisme Revolusi Hijau (Analisis Wacana Kritis pada Buku Teks Sejarah Sekolah),” *Historia: Jurnal Pendidik dan Sejarah* 1, no. 2 (May 2, 2018): 81, <https://doi.org/10.17509/historia.v1i2.10705>.

¹⁴ Wesam Salah Alaloul et al., “Industrial Revolution 4.0 in the Construction Industry: Challenges and Opportunities for Stakeholders,” *Ain Shams Engineering Journal*, October 2019, 1, <https://doi.org/10.1016/j.asej.2019.08.010>.

changes, this era is also called the era of disruption, which is an era where changes are tremendous and it is difficult to predict where the change itself will go.

In the context of ecological *sustainability*, the industrial revolution 4.0 was also no better than the previous industrial revolution. In many cases, because marketing of any product is easy to do through social media (Ig, Facebook, Twitter, etc.) with various commodities, it is not uncommon for commodities that are selling well in the market to continue to be sold without considering the ecological aspect.

Whereas in life, the ecological aspect is important for the survival of living things, including humans in it. Therefore, human awareness of the importance of maintaining the ecology from time to time continues to grow. Ecosystems are not only understood in a local context, but ecosystems are understood in a global context. That is, the issue of damage in one place/country is not only detrimental to the place/country where the natural damage occurred, but also to other countries in the world. Therefore, awareness of climate change has become a global awareness of the world's citizens. Therefore, nowadays the term " *green*" has become a central theme in various developing disciplines. For example, *green policy*, *green economy*, *green building* and others.¹⁵

Long before the *Go Green awareness*, 14 centuries ago the Qur'an and Hadith had reminded the importance of preserving ecology. Call it QS. Al-Rum: 41. The Prophet's hadith regarding the prohibition of throwing water in a place that does not flow,¹⁶ the Prophet's prohibition not to perform ablution with excessive water¹⁷ and other hadiths. Because of the importance of the ecological aspect, several Muslim scholars have also attempted to make *interpretations of biah* (ecological interpretation) and *fiqh biah* (ecological fiqh) as a response to developing ecological issues. Both *Tafsir biah* (ecological interpretation) and *Fiqh biah* (ecological fiqh) are actually manifestations that Islam is a religion of rahmatan lil alamin.

In the *biah* interpretation (ecological interpretation), Nur Arfiyah as quoted by Wildan Imaduddin Muhammad, made a hypothesis based on the Qur'an that humans

¹⁵ Jawade Hafidz, "EKOLOGI KONSTITUSIONAL (GREEN CONSTUTIONAL) DAN KEDAULATAN WILAYAH DI INDONESIA," *Jurnal Hukum* 26, no. 2 (November 28, 2019): 533–34

¹⁶ lihat Muslim bin al-Hajja>j al-Nisa>bu>ri>, *Sjah>i>h> Muslim*, Tahqiq Muhammad Fuad 'Abd al-Ba>qi>, Juz I (Beirut: Da>r Ih>ya>' al-Tura>s> al-'Arabi>, tt), h. 235

¹⁷ lihat Abu 'Abd Allah Muhammad bin Yazid>d al-Qazwaini>, *Sunan Ibnu Maj>ah*, Juz I (Tt: Da>r al-Risa>lah al-'A>lamiyah, 2009), h. 272

are creatures who interact and interconnect with themselves (*hablum minanafsi*), with the same humans (*hablum ma'a ikhwanih*), and with nature (*hablum minal biah*).¹⁸ This means that actually protecting the ecology is the same as taking care of oneself and on the other hand destroying the ecology is the same as destroying oneself.

More specifically, according to Ahmad Saddam, the interpretation of ecology has an ecoteocentric paradigm. This *term* is inspired by the verse of the Qur'an that is often read by Muslims when praying, namely the letter al Fatihah in the first verse, namely " *rabbul alaman* ". In fact, because of the importance of this verse, the Qur'an mentions it 41 times in the Qur'an. Related to this, Abdul Mustaqim understands the linguistic " *rabul alamin* " with the form " *tarkib idafi* " as a message that the existence of God can be known by the existence of nature. Therefore, God is "willing" to *idolize* nature. Destroying the environment is the same as a sign of God's power.¹⁹ The message of the Qur'an is clear that humans who destroy nature get a big sin because they directly or indirectly destroy the greatness of God. In addition, the act of destroying the ecology is an act of *dholim*.

Meanwhile, from several studies on Islamic boarding schools related to developing ecology, the author believes that there are three tendencies.

First, Islamic boarding schools develop ecological aspects by incorporating them into an integrated educational curriculum. The general curriculum here is not a formal curriculum, but a *hidden* curriculum. this was found in²⁰, (Rizal Muttaqin, 2011),²¹(Ahmad Pulung Sudibyo, 2011)²²and (Muhammad Rendi Ramdhani, 2017)

¹⁸ Wildan Imaduddin Muhammad, "NARASI PERJUANGAN KATINI KENDENG DALAM PERSPEKTIF EKOLOGI LIBERATIF AL-QURAN," *Jurnal Harkat : Media Komunikasi Gender* 14, no. 2 (October 7, 2019): 138, <https://doi.org/10.15408/harkat.v14i2.12816>.

¹⁹ Ahmad Saddam, "PARADIGMA TAFSIR EKOLOGI," *Kontemplasi: Jurnal Ilmu-Ilmu Ushuluddin* 5, no. 1 (August 1, 2017): 58–59, <https://doi.org/10.21274/kontem.2017.5.1.49-78>.

²⁰ Slamet Widodo, "PENGEMBANGAN POTENSI AGRIBISNIS DALAM UPAYA PEMBERDAYAAN EKONOMI PONDOK PESANTREN (KAJIAN EKONOMI DAN SOSIOKULTURAL)" 7, no. 2 (2010): 6.

²¹EMANDIRIAN DAN PEMBERDAYAAN EKONOMI BERBASIS PESANTREN (Studi Atas Peran Pondok Pesantren Al-Ittifaq Kecamatan Rancabali Kabupaten Bandung Terhadap Kemandirian Ekonomi Santri Dan Pemberdayaan Ekonomi Masyarakat Sekitarnya) | Muttaqin | JESI (Jurnal Ekonomi Syariah Indonesia)," accessed November 29, 2019,

²²Rahmad Pulung Sudibyo, "INTEGRASI, SINERGI DAN OPTIMALISASI DALAM RANGKA MEWUJUDKAN PONDOK PESANTREN SEBAGAI PUSAT PERADABAN MUSLIM INDONESIA," *Jurnal Salam* 13, no. 2 (January 11, 2011), <http://ejournal.umm.ac.id/index.php/salam/article/view/465>

²³. Learning local skills (materials on agriculture, animal husbandry, fisheries, appropriate technology and others) and pesantren curriculum, with a learning system that integrates theory and practice in an integrated manner.

Second, Islamic boarding schools that develop agribusiness by utilizing the natural potential of Islamic boarding schools. This research can be found in (Urip Muharos, 2009), ²⁴(Selamet Widodo, 2010) and (Rahma Dewi, 2019) ²⁵. Among the development of agribusiness in the form of fattening goats by utilizing the abundance of feed around Islamic boarding schools.

Third, Islamic boarding schools by utilizing eco-friendly architecture. These findings are found in (Irfansa Digna, 2016), ²⁶(Lutfia Brilian Nisa, et al, 2017), ²⁷and (Satrio Ryan Pratama, et al, 2018). ²⁸The concept of Islamic boarding school architecture is based on ecology by maximizing natural greenery so that Islamic boarding schools become very fresh and comfortable. In addition, this concept also utilizes renewable energy so that it is also environmentally friendly.

c. Different Perspectives on Ecological Issues

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²³ Muhammad Rendi Ramdhani, "IMPLEMENTASI PENDIDIKAN LIFE SKILL DI PESANTREN PERTANIAN DARUL FALLAH BOGOR," *TADBIR MUWAHHID* 4, no. 2 (March 20, 2017), <https://doi.org/10.30997/jtm.v4i2.339>.

²⁴ Urip Muharso and I. Wayan Subagiarta, "POLA PENGEMBANGAN USAHA TANI PADA PONDOK PESANTREN AGROBISNIS DI SEKITAR KAWASAN HUTAN MERU BETIRI DI KABUPATEN JEMBER," *JSEP (Journal of Social and Agricultural Economics)* 3, no. 2 (July 1, 2009): 33–48.

²⁵ Rahma Dewi Dewi, "ANALISIS PENGELOLAAN AGRIBISNIS PESANTREN (STUDI KASUS : SERAI WANGI DI PONDOK PESANTREN MUSTHAFAWIYAH PURBABARU KECAMATAN LEMBAH SORIK MARAPI KABUPATEN MANDAILING NATAL PROVINSI SUMATERA UTARA)" (diploma, Universitas Andalas, 2019), <http://scholar.unand.ac.id/52221/>.

²⁶ Ifannisa Digna, ST MT Nur Rahmawati S, and ST MT Yayi Arsandrie, "Redesain Pondok Putri Pesantren Islam Al Mukmin Ngruki Sukoharjo (Dengan Pendekatan Ekologi Arsitektur)" (s1, Universitas Muhammadiyah Surakarta, 2016), <http://eprints.ums.ac.id/45718/>

²⁷ Lutfia Brilian Nisa, Wiwik Setyaningsih, and Hari Yuliasro, "EKO-PESANTREN TAHFIDZUL QUR'AN DENGAN PENDEKATAN ARSITEKTUR EKOLOGI DI BOYOLALI," *ARSITEKTURA* 15, no. 1 (July 26, 2017): 238–44, <https://doi.org/10.20961/arst.v15i1.12174>

²⁸ Satrio Ryan Pratama, Maya Andria Nirawati, and Samsudi Samsudi, "PENERAPAN ARSITEKTUR EKOLOGIS PADA PERANCANGAN PESANTREN AGROBISNIS DI KARANGANYAR," *Senthong* 1, no. 2 (July 20, 2018), <https://jurnal.ft.uns.ac.id/index.php/senthong/article/view/739>.

²⁹ Laura Levine Frader, *The Industrial Revolution: A History in Documents*, Pages from History (New York: Oxford University Press, 2006), 8.

established to produce various commercial needs required by consumers.³⁰ At this time human power began to be replaced by machine power. In addition, the scale of production has also increased many times over in a relatively short time.

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³² Firizky Farawita, “Degradasi Ekologi dan Kapitalisme Revolusi Hijau (Analisis Wacana Kritis pada Buku Teks Sejarah Sekolah),” *Historia: Jurnal Pendidik dan Sejarah* 1, no. 2 (May 2, 2018): 81, <https://doi.org/10.17509/historia.v1i2.10705>.

³³ Wesam Salah Alaloul et al., “Industrial Revolution 4.0 in the Construction Industry: Challenges and Opportunities for Stakeholders,” *Ain Shams Engineering Journal*, October 2019, 1, <https://doi.org/10.1016/j.asej.2019.08.010>.

revolution is being enhanced by digital technology. The development of innovation continues to move without being able to stem it. Because of these tremendous changes, this era is also called the era of disruption, which is an era where changes are tremendous and it is difficult to predict where the change itself will go.

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Long before the *Go Green awareness*, 14 centuries ago the Qur'an and Hadith had reminded the importance of preserving ecology. Call it QS. Al-Rum: 41. The Prophet's hadith regarding the prohibition of throwing water in a place that does not flow,³⁵ the Prophet's prohibition not to perform ablution with excessive water³⁶ and other hadiths. Because of the importance of the ecological aspect, several Muslim scholars have also attempted to make *interpretations of biah* (ecological interpretation) and *fiqh biah* (ecological fiqh) as a response to developing ecological issues. Both *Tafsir biah* (ecological interpretation) and *Fiqh biah* (ecological fiqh) are actually manifestations that Islam is a religion of rahmatan lil alamin.

³⁴ Jawade Hafidz, "EKOLOGI KONSTITUSIONAL (GREEN CONSTUTIONAL) DAN KEDAULATAN WILAYAH DI INDONESIA," *Jurnal Hukum* 26, no. 2 (November 28, 2019): 533–34.

³⁵ lihat Muslim bin al-Hajja>j al-Nisa>bu>ri>, *Sjah>i>h} Muslim*, Tahqiq Muhammad Fuad ‘Abd al-Ba>qi>, Juz I (Beirut: Da>r Ih>ya>’ al-Tura>s} al-’Arabi>, tt), h. 235

³⁶ lihat Abu ‘Abd Allah Muhammad bin Yazid>d al-Qazwaini>, *Sunan Ibnu Maj>ah*, Juz I (Tt: Da>r al-Risa>lah al-’A>lamiyah, 2009), h. 272

In the *biah* interpretation (ecological interpretation), Nur Arfiyah as quoted by Wildan Imaduddin Muhammad, made a hypothesis based on the Qur'an that humans are creatures who interact and interconnect with themselves (*hablum minanafsi*), with the same humans (*hablum ma'a ikhwanih*). , and with nature (*hablum minal biah*). ³⁷This means that actually protecting the ecology is the same as taking care of oneself and on the other hand destroying the ecology is the same as destroying oneself.

D. Conclusion

From the three tendencies of Islamic Boarding Schools and ecology above, in the author's opinion, there is still an empty space and that needs to be done, namely Islamic Boarding Schools which firmly and systematically provide education based on ecology. Not only "half-half" but the totality of both the theological paradigm, curriculum, environmental architecture and the resulting product is also based on ecology. The idea of an ecological boarding school becomes very important considering as the author mentioned above that some Islamic boarding schools that are based on ecology do not run consistently and intact.

³⁷ Wildan Imaduddin Muhammad, "NARASI PERJUANGAN KATINI KENDENG DALAM PERSPEKTIF EKOLOGI LIBERATIF AL-QURAN," *Jurnal Harkat : Media Komunikasi Gender* 14, no. 2 (October 7, 2019): 138, <https://doi.org/10.15408/harkat.v14i2.1>

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