

POPULARIZATION OF ISLAMIC ECOLOGY IN THE PANDAWARA GROUP WASTE MANAGEMENT MOVEMENT ON SOCIAL MEDIA

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Abstract

Waste is a crucial issue that occurs due to the increasing consumerism of people in various circles. Until it causes natural damage that has occurred everywhere. Nature is considered to have no impact on human actions, but when a natural disaster occurs, humans do not realize that it occurs as a result of their actions. So the main focus in this writing is to understand the responsibility of humans as guardians and conservators of the earth. The goal is to explore and identify the applicable steps of the Pandawara movement in spreading Islamic ecological awareness through social media, Instagram and YouTube. With a theological approach applied to the media ecological theory of Richard West and Lynn H, the results of this study show that the content of the pandawara group has a perception that can affect people's feelings, emotions and awareness, so that the concept of ecology in Islam *Hablum mina Allah* and *Hablum minan nas* is reflected in the pandawara movement. The results of the study were also analyzed from netizens' responses through the comment column as a reference for the basis of the research.

Keywords: Islamic Ecology, Pandawara Group, Social Media, Digital Ecology

Introduction

The earth was created in such a way that humans can live in it, more than that, humans as creatures created by God are assigned as rulers on earth with responsibilities that must be carried out by humans. This means that humans as perfect creatures, it is appropriate to take part in protecting the earth from all things, especially environmental cleanliness and waste management, because garbage is one of the causes of disasters on earth. The current waste problem is a serious urgency with population growth and economic activity continuing to increase. Meanwhile, the case of waste management in Indonesia in particular is still a serious problem. Most of the waste is simply thrown away in any place or only limited to being collected in illegal landfills. This is the main factor causing significant environmental pollution, so it can be seen that this phenomenon is a form of ecological collapse in society (Putra, 2023).

From the data information of the waste management system in most areas, there are still many adequate waste disposal and recycling sites. The data on the percentage of waste recorded in the 2023 National Waste Management Information System (SIPSN) reveals a fact, that in Indonesia it is still classified in terms of waste management that

needs to be improved. From the data of the National Management Information System, waste generation from 305 districts throughout Indonesia reached 33,133,123.60 tons/year, with the amount of waste reduction per year only 14.28% or only 4,732,029.07 tons/year. Meanwhile, to overcome this, waste handling in Indonesia only reaches 49/32% or only 16,340,517.56 tons/year, so that in Indonesia waste is consolidated reaching 63.6% or equivalent to 21,072,546.63 tons/year. And waste that has not been managed during 2023 is 36.4% of waste (dan Kehutanan, 2021). In this case, it also looks at how the community must help in overcoming the waste problem and maintaining a waste-free environment.

Starting from issues about waste that are still a fundamental problem in today's society, finally a youth action in Bandung emerged that succeeded in showing concern for the environment, namely the Pandawara group's waste care movement. Lately, social media communities have been shocked by the action of five young people who uploaded their activities cleaning piles of garbage in a very dirty and polluted river in Bandung. The activities carried out by the Pandawara group have the goal of cleaning areas polluted with garbage such as beaches and rivers which can be one of the factors of flood natural disasters, not solely to get praise or validation from others. They also took this action because they wanted to overcome the floods that hit the area where they live every year (Fathiya Sabila Nasas dan Pradipta, 2024). Pandawara group has shown a very inspiring and innovative commitment to protecting the environment through river and beach cleanup activities from polluted garbage, they curate and upload videos on TikTok, Instagram and youtube. Through various video contents that have been uploaded on the Tik Tok Pandawara group account, they just want to prove wrong that the act of picking up garbage in sewers, rivers or beaches is not as bad as many people often think, especially with the current environmental conditions, especially Indonesia. Awareness through the actions of the Pandawara group is one of the most important parts in carrying out an action. The behavior of managing, maintaining, and caring for the environment must also be based on human awareness. In addition to awareness to create a better environment, awareness of the environmental situation that is not doing well also needs to be grown, especially in religious communities. With this awareness, the community has reached the stage of understanding, that the surrounding environment is not good and this environment needs to be further managed as a safeguard of what religion entrusts to humans (Dionisius Jeremia Setiadi, GGabriel Marcelinus Natanael, 2023).

Departing from the phenomenon mentioned above, it demands the importance of socializing the values of concern for environmental cleanliness, especially in terms of waste problems that have been neglected, starting from socializing the values of religious teachings in protecting the environment. Islam contains a set of normative teachings related to the importance of building a harmonious relationship between humans and the natural environment. In the Qur'an, it has been mentioned in advance that environmental damage is getting worse due to the lack of public attention to the environment.

ظَهَرَ الْفَسَادُ فِي الْبَرِّ وَالْبَحْرِ بِمَا كَسَبَتْ أَيْدِي النَّاسِ لِيُذِيقَهُمْ بَعْضَ الَّذِي عَمِلُوا لَعَلَّهُمْ يَرْجِعُونَ ٤١

It has been seen that damage on land and in the sea is caused by human hands. (Through that) Allah made them feel a part of their deeds so that they would return to the right path Al-Rum (30): 41.

It is this phenomenon about the environment that has managed to attract the attention of various intellectuals, especially in relation to ecology. In the Islamic ecological context, there is an encouragement to humans to preserve nature and its ecological system. From the above verse, it is one of the foundations that religion has given orders to humans to protect the universe. This is clarified by previous research conducted by him explaining that in the environmental damage described in the Qur'an is caused by human negligence towards the environment, so that the consequences of the consulative and exploratory nature of humans towards nature cause the emergence of an ecological crisis in Islam (Muzaki, 2021). Continuing regarding waste as a form of ecological crisis that is difficult to avoid, the current ecological crisis as a result of environmental damage, people who have begun to be indifferent to the cleanliness of the surrounding environment. So the ecological crisis actually stems from the lack of awareness of the community as the guardian of the universe, the current ecological crisis occurs due to the lack of awareness of the existence of nature as a gift created by Allah SWT.

Departing from the above problems, researchers consider that the presence of the Pandawara group in social media is able to have a great influence on the current ecological crisis. Pandawara, a group that focuses on environmental issues, wants to increase public awareness of environmental cleanliness through videos uploaded on its social media. As previously conducted by Gabriella Yosiana, it shows that based on the dimensions of media production, media dissemination, and media use to the dimensions of attitudes towards behavior, subjective norms, and perception of behavioral control have a significant correlation, meaning that through social media the Pandawara group is able to have a significant influence on public awareness in maintaining a waste-free environment (Bernadeth & Junaidi, 2024). In addition, in research conducted by Wahyu Eka, he explained that social media is influential to produce effects for society. The influence of social media includes cognitive, affective, and conative matters ranging from providing information about the environment, then giving rise to emotional stimuli of concern, to prosocial behavior involved in maintaining cleanliness, the process occurs simultaneously as a combination of consequences, so that through social media it has succeeded in showing that Pandawara Group's content has an effect on environmentally conscious behavior in the community (Putri, Christiani, Sari, & Pramuja, 2024).

So in this case, the researcher aims to discuss the popularity of the pandawara group on social media from the perspective of Islamic ecology. With a media ecological theory approach, Richard West uncovered how the Pandawara group can influence society and foster a sense of environmental awareness. In this case, social media is a forum for popularizing the Islamic ecological crisis through communication on social media. The novelty in this study is how Islamic ecology sees the environmental cleanup movement carried out by the Pandawara group on social media, by also analyzing how netizens

respond on social media in their awareness as human beings who were created to take part in protecting the universe.

Research Methods

This study uses a qualitative descriptive analysis method with a media ecology approach, namely about how a social media can affect human emotions and perceptions to foster awareness of human obligations as guardians of the universe (Soumaré, Tchana Tchana, & Kengne, 2016). This means that the media is able to popularize and grow public awareness in following in the footsteps of the Pandawara group on social media. In addition, this research also looks from the perspective of Islamic ecology, namely in the concept of *hablumminallah* and *hablumminnas*, which looks at the relationship between God and humans, as well as the relationship between humans and their neighbors. In conducting this study, researchers collected data collectively through social media Tiktok, Instagram and Youtube Pandawara Group, in addition to various official reference sources of books, scientific journals, and official websites and accounts on social media. Furthermore, from these various data, it is processed and analyzed with an approach to draw conclusions. So that the article written produces a result that can be accounted for.

Results and Discussion

Discussion

Biography of Pandawara Group

Pandawara Group comes from the word *Pandawa* which means five and *wara* from the Sundanese language which means good news, then *Pandawara* means five young men who bring good news. *Pandawara* is a group that is engaged in environmental hygiene issues, especially the cleanliness of waste that needs to be considered. *Pandawara* was formed in August 2022 consisting of five young men from Bandung, namely Rafly Pasya, Rifki Sa'dulah, Muchamad Ikhsan, Agung Permana, and Gilang Rahma who were the first to clean the Kopo river in South Bandung. *Pandawara* group managed to achieve its popularity through environmental cleanup movements that include rivers, seas, and so on promoted through social media platforms. *Pandawara* group uses tik-tok media, Instagram, facebook and youtube to provide an invitation to the public to be aware and participate in environmental cleanup activities conveyed through verbal messages on social media. With the environmental clean content they share, *Pandawara* Group not only educates but also succeeds in inviting the community to participate in maintaining the cleanliness of the surrounding environment, especially in eradicating waste that causes natural disasters.

Pandawara Group first published this activity on their Tiktok social media on August 19, 2022 and on Instagram on September 8, 2022. Until now (August 3, 2024), the *Pandawara* group's Tiktok account has 11.9 million followers and 209.5 million likes, while its Instagram account has 3 million followers. With a large number of followers, *Pandawara* group has the ability to spread and grow public awareness of environmental

concerns, especially in terms of waste management, especially among young people. Their campaign about caring for the environment through social media has proven successful in conveying good messages and responses in the community. They are not only focused on cleaning the waste environment, but they are also active in taking other steps to increase public awareness of the importance of maintaining environmental cleanliness, one of which is that they often hold seminars and socialization campaigns about the importance of maintaining environmental cleanliness carried out in high schools and high schools, and elementary schools that are still minimally clean of the environment. and encourage the use of environmentally friendly products to reduce waste.

Pandawara group sets the main goal in the movement that it formed as a forum to spread ecological awareness and community concern for the environment. The approach and strategy carried out by Pandawara in social media has succeeded in inviting community participation and making the environmental care movement something trendy and fun, especially for the younger generation who lack awareness of environmental cleanliness. The approach adopted by the Pandawara group reflects a new creativity and innovation in designing effective environmental campaigns. They succeeded in changing the mindset of the community that boring and disgusting environmental cleaning activities become something interesting and fun. However, despite the emergence of public awareness and participation, ongoing challenges remain. Despite the popularity of this movement, there is a need to ensure that its impact is sustainable.

The Pandawara group movement was motivated by concern for the area where they live which is often affected by floods. Like young people who are always interested in something, they are young people who are moved by their concern for the surrounding environment, starting from curiosity why their area is always hit by floods every year. Their curiosity was aroused by the concern of flood disasters that always hit, and finally it was concluded that the flood that occurred was one of the consequences of the pile of garbage in the surrounding river. Many rivers are polluted and clogged with garbage so that they do not flow like existing rivers (Matondang et al., 2023). This proves that garbage is the main cause of flooding, as a result of the lack of public awareness in terms of waste disposal.

The presence of Pandawara has a positive impact on the community because there are still many individuals or groups who do not have awareness in making efforts to prevent and overcome waste problems in the environment. This is of course due to the lack of public awareness because there are no real models or examples that can inspire, invite and popularize environmental cleanliness, especially waste. With a digital ecological strategy carried out by the pandawara group by uploading its action while picking up piles of garbage in rivers that are very dirty and polluted in the city and province of Bandung. Making the pandawara group's waste care movement able to invite the community in terms of environmental cleanliness, because a positive environmental change must start with real action, not just speaking out without action.

Ecology in Islam

In terminology, ecology is a basic science to understand and investigate the work of ecotoxicity or reciprocal relationships in the life of living things in their living systems, about the sustainability of life in their habitats, how to meet their needs, forms of interaction with other components and species, about adaptation and tolerance to changes that occur, about growth and reproduction that take place naturally in an ecosystem. Ecology is also often interpreted as a discipline that discusses the activities of the mutual relationship of all components in nature (Ulfa, 2021).

Meanwhile, in the context of Islam, religious involvement in environmental issues has become a growing movement in some time. This movement is especially seen in the field of religion and ecology, which seeks to facilitate the exploration and promotion of eco-religious ideas by analyzing, comparing, and combining the views of different religions on nature and human interaction, thus encouraging the integration of religious beliefs with responsibility for nature. Religion has a major role in inspiring the protection and care of nature as an inseparable aspect of spiritual life. This importance is reflected in his efforts to unite religious values with real efforts to care for the environment as an important part of religious duties. In Surah Ar-Rum verse 41 above, it has been emphasized that all damage on the earth occurs as a result of human hands that lack awareness of environmental conservation. This explains that humans are the main actors in environmental destruction, so there are many disasters that Allah wants humans to feel part of their deeds so that they remember the essence of their creation.

The concept of ecological balance in Islam also emphasizes that humans must participate in protecting the universe with love and responsibility as a form of love for God Almighty. In this case, Islamic ecology is not just a philosophical view, but a principle that regulates human actions towards the environment. Because in Islam, the universe and all the creatures He created are considered God's creations full of beauty and wisdom (Wahyuni, 2024).

The Islamic religion has required its people to worship while living in the world, both mahdah (direct) worship and ghairu mahdah (indirect) worship, with this foundation it is hoped that mankind will appreciate the lives of other living beings more and uphold the norms in Islamic teachings in order to realize the benefits in the world, namely in the relationship between humans and nature (Muhammad Farhan Akbar dan Muhammad Yunan Yusuf, 2024). Islamic ecological works are mostly based on the study of the Qur'an and then combined with teachings derived from the life of the Prophet PBUH. In the Qur'an, the earth as human life is mentioned hundreds of times and the basic understanding of the physical world and the role of human beings is explained in the Qur'an. The Prophet Muhammad PBUH as a role model for the ummah also gave a lot of environmental advice and was known, for example, for building a nature reserve and prohibiting the destruction of trees in battle (Härmälä, n.d.). Therefore, harmonization between ecology and religion is something very important in order to actualize religious views in developing understanding to preserve the environment.

The principle of sustainability from an Islamic perspective is based on the concepts of *hablumminallah* (the relationship between humans and Allah), *hablumminannas* (the relationship between humans and the environment), and *hablumminal'alam* (the relationship between humans and the environment) Islam (Abdullah, Muhamad, & Ishak, 2024) not only regulates the relationship between its creatures and God, but also regulates the relationship between fellow humans and the natural environment. In addition to QS. Ar-Rum verse 41, in the Qur'an is also referred to as *hablun minallah* and *hablun minannas*, which means that humans must always maintain a good relationship with God as the creator of the Universe and its contents and also maintain a good relationship with fellow humans and the natural environment (Prabowo, n.d.). The balance of the relationship between God, humans and the universe can certainly be one of the teachings to help solve the ecological crisis on earth.

So, humans must be able to make nature a friend that must always be maintained. In order for nature to give its affection, humans also act the opposite to nature, with the obligation of humans to maintain the natural ecosystem and not damage its sustainability, including in terms of maintaining its cleanliness from garbage. At this point, religion can play a greater role in helping to make people aware of the earth so that they can participate in preserving the environment. In helping to overcome the ecological crisis, Islam also provides solutions to overcome environmental damage and pollution caused by humans. In Islamic ecology, this can show a strong understanding of the relationship between humans, God and nature which should be an inseparable unity of the living system. Therefore, the concept of human beings as guardians of the earth or caliphs on earth is not only a theological view, but is a basis for real action in maintaining all ecosystems on earth as the creation of God Almighty, which includes several aspects such as maintaining the earth's ecosystem, maintaining and caring for biodiversity, and reducing environmental damage from garbage, illegal exploitation and so on. This is in line with the principles of teachings in Islam which always teach goodness, justice, and the preservation of nature which is considered a form of worship to God.

The Popularity of Islamic Ecology and the Pandawara Group on Social Media

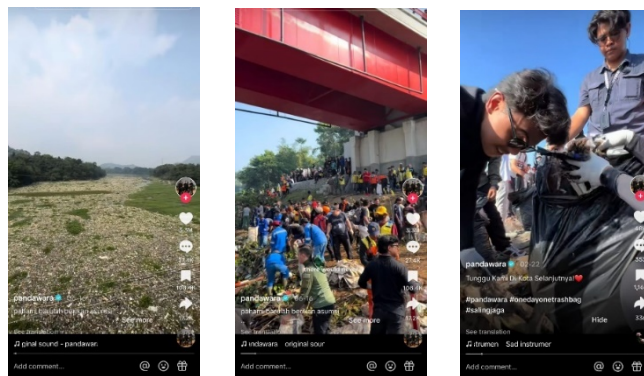
One of the things that is a challenge for the community is about the relationship between ecology, religion and environmental issues. On this occasion, religion can appear more to remind the community not to damage the environment. Environmental damage occurs partly because public awareness and ethics towards the environment are beginning to disappear, so that people from all walks of life can no less appreciate and protect the surrounding environment.

Returning to the Pandawara group's action uploaded on its social media, it contains an invitation to the public related to campaigns that involve the community in carrying out its actions. The prominent theme is "Content on Environmental Cleanliness," Pandawara Group continuously invites the public to care about environmental cleanliness, appreciate and take care of it. The results show that the content created by the Pandawara Group with a focus on environmental cleanliness, has a positive impact on

increasing public awareness of environmental issues and encouraging active participation in maintaining environmental cleanliness, especially in terms of cleaning up waste in rivers, seas and so on (Chintya Noer Aisiyah dan Qurrota A'yun, 2024).

One of the video uploads on the Pandawara Group Instagram account containing an invitation to contribute "*ladies and gentlemen please welcome "The new ocean rubbish"?*" was uploaded on June 11, 2024, managed to get a positive response from the community who participated in cleaning one of the garbage rivers in the city of Citarum. The good response was evidenced by the presence of residents around the Citarum river, the Citarum Police, and the Environment Agency also united in the action of cleaning up garbage in the Citarum river. In the video uploaded through his Tiktok and Instagram accounts, many people also took part in this activity and succeeded in cleaning the island of the garbage river into a perfect river as to what its function is.

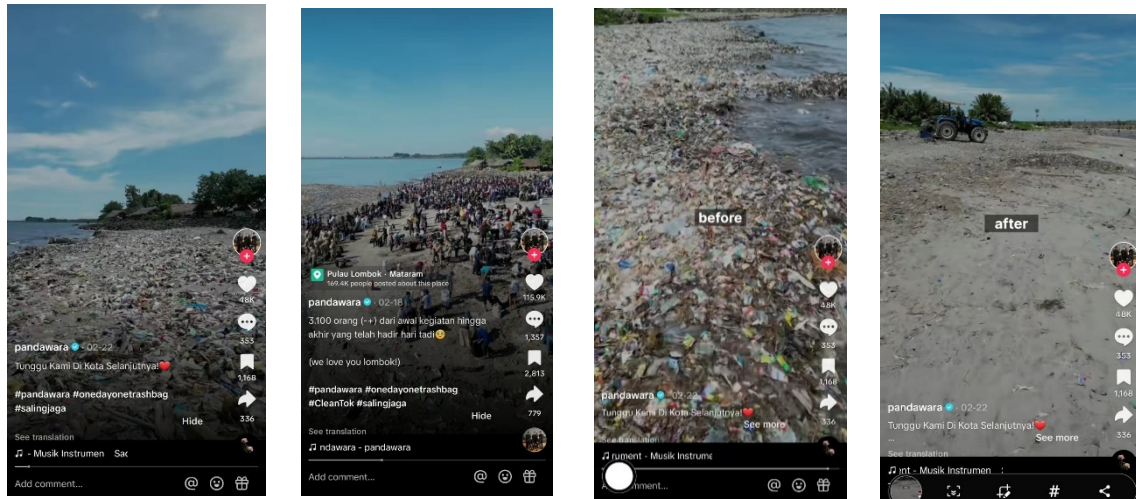
Pandawara's content uploaded on social media depicts various invitations to the entire community, related to a campaign involving all groups to clean the river full of garbage. The community took part in the video which was described as a community that worked together, collaborated and united to eliminate the problem of waste in the river which caused so much suffering for the local community. Especially the problem of garbage that accumulates around the river. So that the uploaded video received a lot of praise and sympathy from Instagram and Tiktok netizens. One of the captions posted by Pandawara Group on social media, namely "Forgive us, O God the ruler of the universe", proves that humans were created by God as guardians of the earth, who should take care of the preservation of the environment, not destroy the earth. The river to Citarum is one of the proofs that the community's awareness is lost in garbage.



Pandawara Group documentation image along with the community, the Environment Agency, and the National Police cleaning the Citarum River

One of the Pandawara contents that was carried out next was cleaning Labuan Haji Beach in Lombok, in its activities the Pandawara group was assisted by 3,100 communities and the ranks of institutions that participated in cleaning up garbage at the Lombok Hajj wharf. They uploaded the video on Tiktok and Pandawara Group's Instagram social media. Concrete actions like this are what the community should do.

Because the cleanliness of waste comes from personal advice, not only from the community or the government.



Documentation of the Labuan Haji Beach cleanup action in Lombok 18 February 2024

All activities that invite and call for something good in accordance with Islamic teachings are part of da'wah. The existence of Pandawara Group on social media is a form of spreading Islamic religious values in terms of love for the environment with their real actions. Through social media, the invitation to love the universe becomes wider and can be accepted by all walks of life. From several responses from netizens on the Pandawara group account, it does not only contain praise, but there are several negative responses as accusations to seek mere popularity. But this does not discourage Pandawara's action in making people aware of the importance of maintaining a waste-free environment.

In ecology on social media, there are at least three basic assumptions about media ecology that have been formulated by Richard W and Lynn H. Turner based on their notes on the influence that social media has on society, the ideas that frame the theory are, first, every movement and activity in society is influenced by the media, second, the media organizes experiences and improves people's perceptions, All three media have a wide reach around the world (West, 2010). Based on the assumption of media ecology above, every action of the community in its actions is not spared from the use of social media as a means to carry out an action, so that there will be a potential that through social media is able to influence and change people's behavior and actions. Continuing in the second session, he explained that through social media it can improve a community's thoughts and actions. Pandawara group comes with various contents that contain invitations to the public to clean up garbage in rivers and seas as a means to increase public awareness that damage and natural disasters are caused by human actions. Then in the third assumption through social media, efforts to make people aware of the importance of clean environment become wider and even worldwide. People who are currently still indifferent

in terms of ecological crises will be more open to the importance of cleanliness. The ecology of social media will be more effective if it is right on target, so that people will be moved to follow in the footsteps that have been carried out by the Pandawara group.

This is in line with the concepts of *hablumminallah* (the relationship between humans and Allah (God)), *hablumminannas* (the relationship between humans and humans) and *hablumminal'alam* (the relationship between humans and the environment) (Majid, Denan, Rahim, Nawawi, & Hazman, 2017). The concept of the triangle of relationship between God, humans, and the environment is seen as an important element in life, *hablumminallah* can be seen based on the application of Islamic religious teachings in all aspects of life, this concept is felt spiritually, not only in the physical. The Pandawara group in its obedience to worship is certainly an expression of its belief in God, in a podcast hosted by Denny Sumargo, Gilang Salam, one of the Pandawara group said that before carrying out garbage cleaning activities in the river or in the sea they always pray to avoid deadly animals and everything that is dangerous, and they do this until now to ask for protection from God Almighty.

Then *hablumminannas* the relationship between fellow humans can be felt by involving culture and social activities. Environmental clean-up activities have a positive impact not only for individuals or Pandawara groups, but for all local communities. So in carrying out its actions, the Pandawara Group always establishes good relations with the local community, cleaners, social environment agencies and even the local police. This reflects that the relationship between humans and others will bring a good influence between others, by respecting each other in order to create togetherness between others. Meanwhile, the *hablumminal'alam* in the perspective of the Pandawara is clearly seen that the youth's action is a form of his love for the environment, a form of concern for nature and a form of responsibility as a human being created by God as the guardian of the earth. Cleaning up garbage in rivers, seas and others is not an easy thing, but it takes great awareness to remain *istiqomah* in protecting the universe.

Protecting the environment in the content in the Pandawara group's social media accounts is very important as one of the efforts to maintain the environment in the life of a more consumptive modern society. This happens because of the many cases of natural damage caused by human actions, so that it has implications for many natural disasters that can harm human life (Aqillah, Wahyuningsih, & Aninnas, 2024). Therefore, the ecological crisis that exists in the community is also important to be handled through movements on social media, which are more effective in socializing the values of forming ecological awareness to the wider community, as well as the message and values of religious ecology are widely conveyed to the community in protecting and caring for nature.

The Pandawara group phenomenon can also prove that through video content on its social media can provide an implicit message of what they have done and have a positive impact on social media netizens, so that the community is aware and concerned about the importance of cleanliness of the surrounding environment, especially in maintaining cleanliness from illegal waste. Based on the description above, it is explained that the

implications of this research can provide knowledge that Islamic ecology conveyed through Pandawara Group's social media as evidence of love for God Almighty and between fellow humans is not only carried out directly but must be able to take advantage of the advancement of digital media that is more developed through social media such as Tiktok, Instagram and Youtube. With this research, it is also hoped that the younger generation can be motivated and more aware and concerned to voice action to clean the environment in various good ways according to Islamic teachings because da'wah is not limited to only talking about religion but about humanity.

Conclusion

The innovations carried out by the Pandawara reflect the triangle of the relationship between God, humans and nature, *hablumminallah*, *hablumminannas* and *hablumminal'alam*, the application of this concept can be seen from the spirituality of the Pandawara Group before carrying out its action as a form of asking God for protection from all harmful things, then in its action they invite the community and all related institutions in the location of their environment, of course this is done to maintain sustainability environments such as rivers, beaches and locations that must be free from garbage.

The media ecological strategy carried out by Pandawara by uploading their videos on social media is not aimed at social media and seeking attention, but every movement and activity in society is influenced by the media, both media are able to organize experiences and improve public perception, and the third media has a wide reach around the world, so that the environmental cleanup action carried out by the Pandawara Group can be witnessed by the public widely through the media social, so that the reach to invite and make people aware of the environment is wider.

From the content of the Pandawara group, it can be clearly understood that there is a message conveyed related to being grateful for the blessings that God gives to humans, which is one of God's priceless gifts that is rivers and seas. Rivers and seas have an important role because considering the great benefits for humankind, water is one of the basic needs for humans that must be met. Therefore, what God has given to man must be preserved and grateful. As Allah says in Surah Ibrahim verse 7 which means: And when your Lord said, "Indeed, if you are grateful, I will surely add (favor) to you, but if you deny (My favor), then indeed My punishment is very heavy."

Bibliography

- Abdullah, Sharifah Fadylawaty Syed, Muhamad, Mohd Dani, & Ishak, Amal Hayati. (2024). Harim Sebagai Instrumen Kelestarian Sumber Air: Harim As An Instrument For The Sustainability Of Water Resources. *Al-Qanatir: International Journal of Islamic Studies*, 33(3), 55–66.
- Aqillah, Muyassyifa Ayu, Wahyuningsih, Sri, & Aninnas, Afina. (2024). Da'wah ecology in digital space: a study of tiktok content pandawara group account. *TATHO: International Journal of Islamic Thought and Sciences*, 27–38.

- Bernadeth, Gabriella Yosiana, & Junaidi, Ahmad. (2024). Pengaruh Konten TikTok terhadap Perubahan Perilaku Menjaga Kebersihan Pengikut Pandawara Group. *Koneksi*, 8(1), 187–196.
- Chintya Noer Aisiyah dan Qurrota A'yun. (2024). Pengaruh Kelompok Pandawara di Media Sosial Terhadap Literasi Kebersihan Lingkungan di Kalangan Mahasiswa Universitas Pendidikan Indonesia. *Jurnal Pengabdian Masyarakat Mandiri*, 2(2).
- dan Kehutanan, Kementerian Lingkungan Hidup. (2021). Sistem informasi pengelolaan sampah nasional. Retrieved from <https://sipsn.menlhk.go.id/sipsn>.
- Dionisius Jeremia Setiadi, GGabriel Marcelinus Natanael, dan Mochamad Ziaul Haq. (2023). "Pelestarian Lingkungan Hidup: Studi Banding Antara Ensiklik Laudato Si dan Teologi Lingkungan Hidup Muhammadiyah,." Kajian Terbuka Integritas, Perdamaian dan Lintas Agama.
- Fathiya Sabila Nasas dan Pradipta. (2024). Dirgantara, "Strategi Komunikasi Lingkungan Grup Pandawara Dalam Menyebarkan Kesadaran Ekologis Di Kota Bandung,." *Jurnal Ilmu Komunikasi Komunikologi*, 12(1).
- Härmälä, Inga. (n.d.). *Transformative Islamic Ecology: A Study of Islamic Ecology in Action*.
- Majid, Noor Hanita Abdul, Denan, Zuraini, Rahim, Zaiton Abdul, Nawawi, Norwina Mohd, & Hazman, Siti Norfakiah. (2017). Sustainability concepts in Malay and aceh traditional houses. *Planning Malaysia*, 15.
- Matondang, Aisyah Rayhan Nabila, Putri, Alvi Zakiyah, Solin, Ayu Erlina Br, Pohan, Baginda Mulia, Harahap, Nursapia, Rosmalina, Rosmalina, Putri, Riska Dwi, & Handayani, Safitri. (2023). Persepsi Mahasiswa UINSU Terhadap Konten Pandawara Grup Dalam Meningkatkan Kesadaran Peduli Lingkungan. *Innovative: Journal Of Social Science Research*, 3(6), 3372–3383.
- Muhammad Farhan Akbar dan Muhammad Yunan Yusuf. (2024). Tafsir Ekologis dan Hakikat Kepemimpinan: Kajian QS. Ar-Rum: 41 dengan Teori Maqashidu Sharia'ah. *Jurnal Pendidikan Inovatif Menarik*, 6(2).
- Muzaki, Ajid Fuad. (2021). *Konsep Ekologi Islam Dalam QS Ar-Rum Ayat 41 (Studi Atas Pemikiran Seyyed Hossein Nasr)*.
- Prabowo, Hayu Susilo. (n.d.). *Manusia dan Perubahan Iklim Dalam Perpektif 6 (Enam) Agama Di indonesia*. Yayasan ICLE-Local Governments for Sustainability Indonesia.
- Putra, Andreas Maurenis. (2023). Alam, Manusia, Dan Teknologi: Analisis Filosofis Dan Refleksi Teologis Terhadap Krisis Modern. *SOLA GRATIA: Jurnal Teologi Biblika Dan Praktika*, 4(1).
- Putri, Wahyu Eka, Christiani, Lintang Citra, Sari, Fakhrisa Nurtalitha, & Pramuja, Muhammad. (2024). Pengaruh Paparan Konten Tiktok Pandawara Group terhadap Perilaku Sadar Lingkungan. *Jurnal Communio: Jurnal Jurusan Ilmu Komunikasi*, 13(2), 360–373.
- Soumaré, Issouf, Tchana Tchana, Fulbert, & Kengne, Thierry Martial. (2016). Analysis of the determinants of financial inclusion in Central and West Africa. *Transnational Corporations Review*, 8(4), 231–249. <https://doi.org/10.1080/19186444.2016.1265763>
- Ulfa, As'ad Taufiqurrahman dan Mawaddatul. (2021). Pendekatan Ekologis dalam Kajian Islam. *Jurnal Nuansa Kenotariatan*, 14(1).
- Wahyuni, Sri. (2024). *Rahmatan Lil Alamin: Pendidikan Ekologi dalam Keseimbangan Dengan Alam*.

West, R. (2010). *Introducing communication theory: Analysis and application*. McGraw-Hill.

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