

IMPLEMENTING YUSUF AL-QARADAWI'S FIQH AL-BI'AH VALUES TO STRENGTHEN ENVIRONMENTAL LITERACY AT UIN RADEN MAS SAID SURAKARTA

Didiek Noeryono Basar^{1*}, Antis Rachmayanti², Ahmad Nurrozaq Murbayanto³

¹Universitas Islam Negeri Kiai Ageng Muhammad Besari Ponorogo, Indonesia

²Universitas Islam Negeri Kiai Ageng Muhammad Besari Ponorogo, Indonesia

³Universitas Darussalam Gontor, Indonesia

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*Corresponding Author: didieknoeryono2@uinponorogo.ac.id

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Abstract

Environmental issues in Islamic higher education institutions have encouraged the importance of strengthening environmental literacy based on Islamic ecological values. This study aims to examine the application of ecological values in Yusuf al-Qardhawi's Fiqh al-Bi'ah as a conceptual foundation for the development of environmental management literacy in Islamic universities, with a case study of the "Pijar Semesta" Waste Bank at UIN Raden Mas Said Surakarta. Using a qualitative descriptive method with a case study approach to understand how Islamic values are implemented in environmental management at Islamic universities. Data were collected through in-depth interviews, participatory observation, and document analysis of administrators, students, and supporting documents. Data analysis was conducted using the interactive model by Miles, Huberman, and Saldana. The research results indicate that the implementation of Yusuf al-Qaradawi's Fiqh al-Bi'ah in the "Pijar Semesta" Waste Bank program successfully integrates modern environmental management principles with Islamic spiritual values. The management stages from organizational formation, outreach, customer registration, sorting, deposit, weighing, to reporting reflect the application of the values of trust (amanah), justice, responsibility, balance (mizan), and the spirit of mutual aid (ta'awun). This program not only yields ecological benefits through waste reduction and improved campus cleanliness but also has educational and spiritual impacts by fostering awareness among the academic community of their role as stewards in preserving the earth. Therefore, this study recommends strengthening the integration of Islamic ecological values into the curriculum, expanding cross-institutional collaboration, and developing digital innovations to realize a green campus based on faith, knowledge, and action.

Abstrak

Permasalahan lingkungan di perguruan tinggi Islam mendorong pentingnya penguatan literasi lingkungan berbasis nilai-nilai ekologis Islam. Penelitian ini bertujuan mengkaji penerapan nilai-nilai ekologis dalam Fiqh al-Bi'ah Yusuf al-Qardhawi sebagai landasan konseptual bagi pengembangan literasi manajemen lingkungan di perguruan tinggi Islam, dengan studi kasus pada Bank Sampah "Pijar Semesta" UIN Raden Mas Said Surakarta. Menggunakan metode deskriptif kualitatif dengan pendekatan studi kasus untuk memahami bagaimana nilai-nilai Islam diimplementasikan dalam pengelolaan lingkungan Perguruan Tinggi Islam. Data dikumpulkan melalui wawancara mendalam, observasi partisipatif, dan analisis dokumentasi terhadap pengelola, mahasiswa, serta dokumen pendukung. Analisis data dilakukan menggunakan model interaktif Miles, Huberman, dan Saldana. Hasil penelitian menunjukkan bahwa implementasi Fiqh al-Bi'ah Yusuf al-Qaradawi dalam program Bank Sampah "Pijar Semesta" berhasil mengintegrasikan prinsip-prinsip manajemen lingkungan modern dengan nilai-nilai spiritual Islam. Tahapan pengelolaan mulai dari pembentukan organisasi, sosialisasi, pendaftaran nasabah, pemilahan, penyeteran, penimbangan, hingga pelaporan mencerminkan penerapan nilai amanah, keadilan, tanggung jawab, keseimbangan (mizan), serta semangat tolong-menolong (ta'awun). Program ini tidak hanya memberikan dampak ekologis melalui pengurangan sampah dan peningkatan kebersihan kampus, tetapi juga berdampak edukatif dan spiritual dengan menumbuhkan kesadaran sivitas akademika akan peran

sebagai khalifah dalam menjaga kelestarian bumi. Oleh karena itu, penelitian ini merekomendasikan penguatan integrasi nilai-nilai ekologis Islam dalam kurikulum, perluasan kolaborasi lintas lembaga, serta pengembangan inovasi digital guna mewujudkan green campus berbasis iman, ilmu, dan amal.

Keywords: Fiqh al- Bi'ah; Yusuf al-Qardhawi; values ecological Islam; literacy management environment; Waste Bank Incandescent Universe



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INTRODUCTION

Environmental problems and the rapid development of information technology have become global challenges that require serious attention from Islamic higher education institutions.¹ In line with this study,² environmental and digital literacy³ in Islam play important roles in strengthening innovation, social media utilization, and sustainable development based on Islamic values.⁴ College tall as center development knowledge knowledge and morality own not quite enough answer strategic in form awareness ecological academic community.⁵ In context This is Fiqh al-Bi'ah which was initiated by Yusuf al- Qardhawi offer paradigm ethical and theological about connection man with nature, emphasize principle balance (tawazun), responsibility answer (mas'uliyah), and preservation (hifzh al- bi'ah) as manifestation from obedience to God.⁶ Values ecological the can become runway normative in build literacy management sustainable environment in college high Islam.⁷

UIN Raden Mas Said Surakarta is one of the example institutions that have implement values the through the Waste Bank program Incandescent Universe.⁸ This program No only aim manage rubbish in a way productive and friendly environment, but also internalize values Islam like cleanliness , responsibility answer social and caring to nature.⁹ With Thus, the management of the Waste Bank Incandescent Universe can made into studies interesting case For see How the principles of Yusuf al- Qardhawi's Fiqh al- Bi'ah can implemented in a way real in literacy management environment at college high Islam, at the same time strengthen role campus as agent change going to sustainability ecological .

Study this is basically Already Once done by several expert previously among them Margarita C. Paghasian, "Awareness and Practices on Solid Waste Management among College

¹ Eny Supriati et al., "Strategic Model for Strengthening Digital Literacy at UIN Ponorogo And UIN Kediri: Synergy of Curriculum and Educational Programs," *Muslim Heritage* 10, no. 1 (2025): 106–26, <https://doi.org/10.21154/muslimheritage.v10i1.10891>.

² Dina Anisya Rufaedah and Achmad Room Fitrianto, "Peran Perdagangan Internasional Bagi Pertumbuhan Ekonomi Indonesia: Tantangan Dan Peluang Di Era Globalisasi Dalam Perspektif Islam," *Muslim Heritage* 9, no. 1 (2024): 61–82, <https://doi.org/10.21154/muslimheritage.v9i1.7707>.

³ Sulasih Sulasih et al., "Identifikasi Penggunaan Media Sosial Dan Dampaknya Pada Kinerja Pemasaran Dalam Perspektif Ekonomi Islam Pada Usaha Skala Mikro Di Kabupaten Banyumas," *Muslim Heritage* 9, no. 1 (2024): 147–71, <https://doi.org/10.21154/muslimheritage.v9i1.7555>.

⁴ Sulasih et al., "Identifikasi Penggunaan Media Sosial Dan Dampaknya Pada Kinerja Pemasaran Dalam Perspektif Ekonomi Islam Pada Usaha Skala Mikro Di Kabupaten Banyumas."

⁵ Hasan Kusuma Wardhana And Desy Safitri, "Upaya Untuk Menumbuhkan Kesadaran Lingkungan Di Perguruan Tinggi," *JICN: Jurnal Intelek Dan Cendekiawan Nusantara* 2, No. 3 (2025): 2974–84.

⁶ Yusuf Al-Qordhowi, *Ri'ayatul Biah Fi Syari'atil Islam* (Darussyuruq, 2021).

⁷ Sayid Ahmad Ramadhan and Khairil Anwar, "Merenerasi Konsep Fikih Al-Bi'ah Dalam Dunia Pendidikan: Program Adiwiyata Berbasis PAI Progresif Sebagai Upaya Membumikan Karakter Cinta Lingkungan," *Jurnal Intelektualita: Keislaman, Sosial Dan Sains* 14, no. 1 (2025): 183–99, <https://doi.org/10.19109/intelektualita.v14i1.29533>.

⁸ Senem Fatma Gungor et al., "From vision to visibility: Green Campus initiatives at Ankara's universities," *Journal of Water and Land Development*, September 26, 2025, 235–43, <https://doi.org/10.24425/jwld.2025.155318>.

⁹ Nuning Hasanah, "Pengelolaan Bank Sapah Pijar Semesta," Wawancara 2024.

Students in Mindanao State University Maigo School of Arts and Trades”, points out that although awareness Mindanao State University School students Arts and Commerce Maigo about management rubbish congested classified as high, its influence to practice they varies. Practice student in matter sorting, reduction, use return and recycle repeat rubbish proven okay, meanwhile practice they in disposal rubbish Still less than optimal. Although awareness they to management rubbish congested No influence practice disposal, awareness the in a way significant contribute to behavior they in matter sorting, reduction and recycling repeat. Findings This highlight importance improvement awareness among student for push practice management more trash effective and sustainable, especially in sorting and recycling repeat rubbish.¹⁰

Kianoosh Ebrahimi and Leslie A. North, "Effective Strategies for Enhancing Waste Management at University Campuses". This study highlights the important role of policy instruments, including purchasing policies and recycling initiatives, in implementing effective zero-waste management programs in higher education institutions. Comparing waste strategies at leading American universities and Western Kentucky University, the study emphasizes clear objectives, stakeholder responsibilities, waste characterization studies, and integrated policies. These findings provide valuable insights and best practices for universities globally to achieve successful and collaborative zero-waste management initiatives.¹¹

Pankshin Federal College of Education et al., “Assessment of College Students' Knowledge and Attitudes Towards Solid Waste Management in North Central Zone of Nigeria”. This study concludes that students in North-Central Nigeria demonstrate positive attitudes toward solid waste management despite having limited knowledge. A significant relationship exists between knowledge and attitudes, indicating that improved understanding can encourage better behavior. Since gender showed no significant influence, integrating structured waste management education into higher education curricula is essential.¹²

Sunil Kumar et al., “Challenges and Opportunities Associated with Waste Management in India,” India faces major challenges in solid waste management due to rapid population growth and urbanization, impacting environmental and public health. However, opportunities exist through waste sorting, recycling, and waste-to-energy technology. International discussions emphasize reducing landfill dependence, while highlighting the need for skilled professionals and technical training to achieve sustainable and efficient waste management systems.¹³ Romenick Alejandro Molina and Ivey Catan, “Solid Waste Management Awareness and Practices among Senior High School Students in a State College in Zamboanga City, Philippines”. The study shows that students possess adequate knowledge of solid waste management, including its definition, environmental impacts, and proper disposal practices. However, understanding of waste management regulations remains limited. Students demonstrate positive practices such as waste sorting, recycling, and reuse. Awareness is mainly influenced by mass media, parents, and social media, highlighting the importance of integrating waste management education and

¹⁰ Margarita C. Paghasian, “Awareness and Practices on Solid Waste Management among College Students in Mindanao State University Maigo School of Arts and Trades,” paper presented at 3rd International Conference on Education

¹¹ Kianoosh Ebrahimi and Leslie A. North, “Effective Strategies for Enhancing Waste Management at University Campuses,” *International Journal of Sustainability in Higher Education* 18, no. 7 (2017): 1123–41, <https://doi.org/10.1108/IJSHE-01-2016-0017>.

¹² Federal College of Education Pankshin et al., “Assessment of College Students' Knowledge and Attitudes Towards Solid Waste Management in North Central Zone of Nigeria,” *Science Education International* 28, no. 2 (2017): 141–46, <https://doi.org/10.33828/sei.v28.i2.7>.

¹³ Sunil Kumar et al., “Challenges and Opportunities Associated with Waste Management in India,” *Royal Society Open Science* 4, no. 3 (2017): 160764, <https://doi.org/10.1098/rsos.160764>.

regulatory awareness to promote more effective and sustainable environmental practices in the future.¹⁴

Guerrero, Maas, and Hogland, "Solid Waste Management Challenges for Cities in Developing Countries." This study reveals that solid waste management in developing countries faces major challenges due to increasing waste volume, limited budgets, and insufficient understanding of management factors. Using data from 22 developing countries, the study identifies key stakeholders and critical failure factors, providing valuable insights for designing more effective and sustainable waste management systems that reduce environmental and public health impacts.¹⁵

Sarah Elsaid and El- Houssaine Aghezzaf, "A Framework for Sustainable Waste Management: Challenges and Opportunities". This study develops a comprehensive conceptual framework for sustainable waste management systems in rapidly growing urban areas, particularly in developing countries. The framework integrates recycling, composting, waste-to-energy incineration, and landfill management while considering economic, environmental, and social aspects. By identifying key inputs and expected outputs, the study offers valuable guidance for designing practical, integrated, and sustainable waste management systems to address urban environmental challenges effectively.¹⁶

David C. Wilson, Costas A. Velis, and Ljiljana Rodic, "Integrated Sustainable Waste Management in Developing Countries", This study highlights that Integrated Sustainable Waste Management (ISWM) has been successfully implemented in many developing countries despite significant challenges. ISWM combines physical waste management components with governance aspects such as inclusivity, financial sustainability, and supportive policies. Recent progress shows improved collection and controlled disposal rates, while the informal sector contributes significantly to recycling. The findings demonstrate that effective, affordable, and sustainable waste management systems can be achieved when adapted to local conditions and supported by active community involvement and stakeholder collaboration.¹⁷

AJ Morrissey and J Browne, "Waste Management Models and Their Application to Sustainable Waste Management", point out that although various management models rubbish city has developing, partly big Still own significant shortcomings. Existing models, which generally focus on analysis cost- benefit assessment cycle live, or taking decision multicriteria, tends to more emphasize on improvement stage evaluation rather than on managing the decision-making process decision That alone. Although many models are aware of this importance consider aspect environmental, economic and social For create management sustainable waste, no There is any model that is effective integrate third aspect the in its

¹⁴ Romenick Alejandro Molina And Ivey Catan, "Solid Waste Management Awareness And Practices Among Senior High School Students In A State College In Zamboanga City, Philippines," *Aquademia* 5, No. 1 (2021): Ep21001, <https://Doi.Org/10.21601/Aquademia/9579>.

¹⁵ Lilliana Abarca Guerrero Et Al., "Solid Waste Management Challenges For Cities In Developing Countries," *Waste Management* 33, No. 1 (2013): 220–32, <https://Doi.Org/10.1016/J.Wasman.2012.09.008>.

¹⁶ Sarah Elsaid and El- Houssaine Aghezzaf , "A Framework for Sustainable Waste Management: Challenges and Opportunities," *Management Research Review* 38, no. 10 (2015): 1086–97, <https://doi.org/10.1108/MRR-11-2014-0264>.

¹⁷ David C. Wilson Et Al., "Integrated Sustainable Waste Management In Developing Countries," *Proceedings Of The Institution Of Civil Engineers - Waste And Resource Management* 166, No. 2 (2013): 52–68, <https://Doi.Org/10.1680/Warm.12.00005>.

implementation. Therefore that, is necessary further model development holistic and integrated for create system management rubbish more cities effective and sustainable.¹⁸

Carlo M Punongbayan et al., “Waste Management Practices of an Educational Institution”. Conclusion of study This show that practice management waste in LPU-B in general overall effective in aspect collection, disposal, recovery and processing rubbish according to evaluation respondents. However, there are a number of problems, especially related with location place disposal trash that is not strategic, as well as lack of implementation strict in matter recovery and use return waste.¹⁹ This is show existence need For increase management waste in LPU-B, with focus on improvement system sorting garbage, arrangement location more disposal efficient, and strengthening implementation policy recovery as well as use return waste so that it can create system management more trash effective and sustainable.²⁰

Environmental degradation, waste accumulation, and the low level of ecological awareness among academic communities have become major challenges for higher education institutions, including Islamic universities. Although various green campus²¹ programs and waste bank initiatives have been implemented, many of these efforts still focus primarily on technical and administrative aspects of environmental management. Consequently, environmental awareness has not been fully internalized as an ethical, spiritual, and religious responsibility among members of the academic community. In Islamic higher education institutions, environmental management should not only emphasize physical sustainability but also integrate Islamic values that encourage ecological responsibility²² and harmonious relationships between humans and nature. Therefore, this research highlights the importance of developing a holistic environmental literacy management model based on the concept of Fiqh al-Bi'ah proposed by Yusuf al-Qardhawi.²³

Based on this background, the study seeks to address several important questions. First, how is environmental literacy management implemented through waste bank programs in Islamic higher education institutions? Second, how are the values of Fiqh al-Bi'ah integrated into environmental management practices on campus? Third, how do Islamic ecological values contribute to strengthening environmental awareness and sustainable behavior among students and the academic community? Finally, how does the integration of Fiqh al-Bi'ah support the realization of a sustainable green campus²⁴ culture in Islamic universities? These questions become the foundation for examining the relationship between environmental management practices and Islamic ecological values in higher education.

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- ¹⁸ AJ Morrissey And J Browne, “Waste Management Models And Their Application To Sustainable Waste Management,” *Waste Management* 24, No. 3 (2004): 297–308, <https://doi.org/10.1016/j.wasman.2003.09.005>.
- ¹⁹ Samsul Hadi et al., “Processing Organic Waste Using Maggot Black Soldier Fly at The Landasan Ulin Tengah Pokmas, Landasan Ulin,” *Kayub Baimbai: Jurnal Pengabdian Masyarakat* 1, no. 2 (2024): 34–40, <https://doi.org/10.69959/kbjpm.v1i2.35>.
- ²⁰ Carlo M. Punongbayan et al., “Waste Management Practices of an Educational Institution,” *Asia Pacific Journal of Education* 1, no. 4 (2014).
- ²¹ Masturin Masturin et al., “Tawhid-Based Green Learning in Islamic Higher Education: An Insan Kamil Character Building,” *QIJIS (Qudus International Journal of Islamic Studies)* 10, no. 1 (2022): 215, <https://doi.org/10.21043/qijis.v10i1.14124>.
- ²² Islamul Haq et al., “Eco-Theological Insights on The Sasi Tradition: Analyzing Environmental Ethics and Sanctions Through Fiqh al-Bi'ah and Islamic Criminal Law,” *Al-Istinbath: Jurnal Hukum Islam* 10, no. 1 (2025): 58–80, <https://doi.org/10.29240/jhi.v10i1.9412>.
- ²³ Muhammad Majdy Amiruddin et al., “Reforming Fiqh Al-Bi'ah (Ecological Jurisprudence) Based on Islam Hadhari: An Integration Conservation Framework of Muamalah and Culture,” *International Journal of Law and Society (IJLS)* 3, no. 3 (2024): 187–205, <https://doi.org/10.59683/ijls.v3i3.99>.
- ²⁴ Jabatan Kejuruteraan Awam, Politeknik Sultan Idris Shah et al., “Kajian Kesedaran Dan Amalan Kampus Hijau Di Politeknik Malaysia,” *Jurnal Kejuruteraan* 36, no. 6 (2024): 2323–36, [https://doi.org/10.17576/jkukm-2024-36\(6\)-07](https://doi.org/10.17576/jkukm-2024-36(6)-07).

The objectives of this research are to analyze the implementation of environmental literacy management through waste bank programs in Islamic higher education institutions and to examine the integration of Fiqh al-Bi'ah values introduced by Yusuf al-Qardhawi into environmental management practices. Furthermore, this research aims to identify the role of Islamic ecological values in fostering environmental awareness and sustainable behavior among members of the academic community. In addition, the study seeks to formulate a holistic model of environmental literacy management that combines environmental sustainability practices with Islamic ethical and spiritual values in order to strengthen the realization of a green campus culture.²⁵

Previous studies have shown similarities with this research, particularly in their focus on sustainable environmental management in higher education through waste bank programs and environmental literacy initiatives. Earlier research emphasized the importance of academic community involvement in maintaining campus cleanliness, waste sorting, recycling activities, and converting waste into products with economic value. In addition, previous studies highlighted efforts to improve environmentally friendly behavior among students and their contribution to supporting green campus programs.²⁶ These studies shared a common orientation toward creating clean, healthy, and sustainable academic environments. However, most previous research mainly focused on the technical and managerial dimensions of environmental management, while limited attention was given to the integration of religious, ethical, and spiritual values in ecological practices. Environmental management was generally viewed as a practical and institutional activity rather than as a moral and theological responsibility.

Therefore, this research offers a significant scientific novelty by introducing a conceptualization of environmental literacy management based on the values of Fiqh al-Bi'ah developed by Yusuf al-Qardhawi within the context of Islamic higher education institutions. This study integrates Islamic ethics, spirituality, and ecological jurisprudence into sustainable campus management, positioning environmental preservation not only as an ecological responsibility but also as a religious obligation. The concept of Fiqh al-Bi'ah emphasizes principles such as balance (*tawazun*), responsibility (*mas'uliyah*), and environmental preservation (*hifzh al-bi'ah*) as the normative foundation for environmental literacy management. In this regard, the research bridges Islamic ecological theory with practical environmental management strategies in higher education institutions.²⁷ It demonstrates that the success of green campus initiatives is determined not only by policies and infrastructure, but also by the internalization of Islamic ecological values within the culture and behavior of the academic community. Thus, this study contributes significantly to the development of contemporary Islamic environmental jurisprudence, the strengthening of ecoliteracy culture in Islamic universities, and the advancement of sustainable environmental management models grounded in Islamic values.

ETHICS AND PRINCIPLES OF ENVIRONMENTAL MANAGEMENT FROM AN ISLAMIC PERSPECTIVE

²⁵ Senem Fatma Gungor et al., "From vision to visibility: Green Campus initiatives at Ankara's universities," *Journal of Water and Land Development*, September 26, 2025, 235–43, <https://doi.org/10.24425/jwld.2025.155318>.

²⁶ Noor Ahmed et al., "Green Campuses: Sustainable Practices in Schools and Universities," in *Digital Innovation and Sustainability in Education*, ed. Joanna Rosak-Szyrocka et al. (Edward Elgar Publishing, 2025), <https://doi.org/10.4337/9781035359561.00011>.

²⁷ Zohar Barnett-Itzhaki et al., "Strategies and Challenges for Green Campuses," *Frontiers in Sustainable Cities* 7 (May 2025): 1469274, <https://doi.org/10.3389/frsc.2025.1469274>.

Islam views the environment as an integral part of Allah SWT's creation. All elements of nature, whether living or non-living, continuously glorify and submit to Allah, as stated in the Qur'an: "The seven heavens, the earth, and all that is in them glorify Him..." (QS. Al-Isra': 44). This perspective highlights that humans are not separate from nature but are part of a harmonious cosmic order created by Allah. Therefore, Islam teaches its followers to live in harmony with the environment and to preserve it with love, care, and responsibility.

This theological foundation has given rise to the concept of Fiqh al-Bi'ah, an Islamic paradigm that regards environmental preservation as an essential component of the objectives of Islamic law (maqāṣid al-sharī'ah). The concept of hifz al-bi'ah emphasizes that protecting the environment is a religious obligation based on the principles of respect, compassion, responsibility, simplicity, and justice.²⁸ Its practical implementation can be observed in various contexts, including the development of ecological awareness in pesantren,²⁹ the *sasi* tradition that integrates local wisdom with environmental conservation,³⁰ and the Eco-Tahfiz model in Malaysia that combines Islamic education with sustainability initiatives.³¹ These examples demonstrate the significant role of Fiqh al-Bi'ah in fostering ecological responsibility and supporting sustainable development.

In line with these principles, Islam appoints humans as *khalifah fil ardh* (stewards of the earth) who bear the responsibility of protecting and preserving the environment from destruction. The Qur'an explicitly prohibits environmental degradation, stating: "And do not cause corruption on the earth after it has been set in order" (QS. Al-A'raf: 56). This teaching emphasizes that nature is an *amanah* (trust) from Allah SWT that must be managed responsibly. While humans are granted the right to utilize natural resources, they are equally obligated to maintain ecological balance and sustainability. Consequently, environmental conservation is not merely a social obligation but also an act of worship, gratitude, and obedience to Allah SWT, reflecting spiritual awareness and compassion toward all creation.

In Islamic jurisprudence, environmental preservation is an essential principle reflected in the *fiqh* rule *la dharar wa la dharar* (causing no harm to oneself or others),³² which prohibits environmental destruction because it harms humanity and future generations. Environmental protection also supports the objectives of *maqashid sharia* in safeguarding religion, life, intellect, lineage, and property. Islam further emphasizes ecological values through principles such as cleanliness, greening, conservation of natural resources, environmental balance (*mizan*), and preventing environmental damage to ensure sustainable life and public welfare.³³

This It means In Islam, there are pillars that uphold tall preservation environment, which becomes guide for people in guard sustainability nature. *First*, reforestation, namely plant trees and maintain plant as form guard quality air, prevent erosion, and provides habitat for creature

²⁸ Ahmad Sarip Saputra et al., "Hifdh Al-Bi'Ah as Part of Maqāṣid Al-Sharī'Ah: Yūsuf Al-Qarḍāwī's Perspective on the Environment in Ri'ayat al-Bi'Ah Fi Shari'Ah al-Islām Book," 2021, 030106, <https://doi.org/10.1063/5.0052768>.

²⁹ Liza Diniarizky Putri et al., "Developing Ecological Piety in Pesantren: The Kyai's Cognition and the Practice of Living Fiqh al-Bi'ah in Banten," *Ijtihad: Jurnal Wacana Hukum Islam Dan Kemanusiaan* 23, no. 2 (2024): 235–59, <https://doi.org/10.18326/ijtihad.v23i2.235-259>.

³⁰ Islamul Haq et al., "Eco-Theological Insights on The Sasi Tradition: Analyzing Environmental Ethics and Sanctions Through Fiqh al-Bi'ah and Islamic Criminal Law," *Al-Istinbath: Jurnal Hukum Islam* 10, no. 1 (2025): 58–80, <https://doi.org/10.29240/jhi.v10i1.9412>.

³¹ Abd. Aziz Rekan and Mohd Istajib Mokhtar, "The Development of Eco-Tahfiz In Malaysia: Bridging Islamic Education and Environmental Sustainability," *Ulumuna* 29, no. 1 (2025): 1–31, <https://doi.org/10.20414/ujs.v29i1.1431>.

³² Yusuf al-Qordhawi, *Ri'ayatul Biab Fi Syari'atil Islam* (Kairo, Mesir: Darussyuruq, 2021).

³³ Al-Qordhawi, *Ri'ayatul Biab Fi Syari'atil Islam* (Kairo, Mesir: Darussyuruq, 2021), 57.

life other. Rasulullah SAW said that plant tree is charity that has a reward Keep going flow during the result utilized creature life. *Second*, environmentally friendly architecture and investment environment, namely build facilities and manage source Power in a way wise so that No cause damage nature, at the same time oriented towards sustainability. *Third*, cleanliness (*nazhafah*) and purity (*thabarab*), which are part from faith, including guard cleanliness self, environment, places of worship, and facilities general.

Fourth, guarding source Power nature, including water, land, air, and diversity life, so that it does not exploited in a way excessive, so that still available for generation coming. *Fifth*, protector for human, namely ensure environment free from danger pollution and damage that can threaten health and safety life. Sixth, kindness for environment, which means every action must bring benefits, such as reduce use material dangerous, recycling repeat, and save energy.

Seventh, maintain environment from damage (*ifساد fil- ardh*), as Allah SWT prohibits in the Qur'an for No make damage to the earth, both through pollution, illegal logging, and logging forest without reforestation. Eighth, maintaining balance environment (*mizan*), namely look after harmony between humans, nature, and creatures life others, as has determined by Allah SWT, so created a stable and sustainable ecosystem. These pillars, if implemented in a way consistent, will become runway sturdy for realization environment clean, healthy and sustainable life, at the same time form practice trust man as a caliph on earth.³⁴

From the exposure on can concluded that ethics and principles management environment in Islamic perspective based on values monotheism, responsibility responsibility, and balance. Islam teaches that natural is creation of Allah SWT that must be respected and guarded, because all over element natural praying the rosary to Him. Humans as the caliph has moral and spiritual obligation to manage environment in a way wise, no excessive, and avoid all form damage (*ifساد fil- ardh*). Islamic principles such as *la dharar wa la dhirar* and concept *maqashid sharia* become base that guard environment means guard sustainability life and welfare people. This ethic reflected in various pillars of Islam, such as greening cleanliness, preservation source Power nature and balance ecosystem . With Thus, management environment in Islam not only affairs worldly, but also part from worship and form real obedience to Allah SWT.

IMPLEMENTATION OF MANAGEMENT OF THE PIJAR SEMESTA WASTE BANK, UIN RADEN MAS SAID SURAKARTA

UIN Raden Mas Said Surakarta was selected as the object of this research because it demonstrates an innovative environmental management model through the “Pijar Semesta” Waste Bank program, which integrates sustainable waste management with Islamic ecological values. Unlike many universities that emphasize only technical and administrative aspects, UIN Raden Mas Said Surakarta applies the principles of *Fiqh al-Bi’ah* by Yusuf al-Qardhawi as the ethical and spiritual foundation of its green campus initiatives. This approach is reflected in waste reduction, recycling activities, ecological awareness, and collective participation among the academic community. Furthermore, the university integrates environmental education, community engagement, and Islamic values into its institutional culture, making it a relevant case study for sustainable environmental governance in Islamic higher education.

Garbage Bank Incandescent Universe, established on January 3, 2022 below under the auspices of DWP UIN Raden Mas Said Surakarta, present as initiative real in support management environment campus. When this activity mainly focuses on collecting and managing rubbish inorganic as step beginning going to system management more trash comprehensive. Mrs. Nuning Hasanah convey

³⁴ al-Qordhowi, *Ri’ayatul Biah Fi Syari’atil Islam* (Kairo,Mesir: Darussyuruq, 2021).

*“Garbage bank” incandescent universe That stand January 3, 2022, that is managed by DWP UIN Raden Mas Said Surakarta, moving For collection current garbage Still focus on waste inorganic.*³⁵

Based on documentation material about waste bank management, it is stated that the Trash Bank Incandescent Universe official was established on January 3, 2022, and is under under the auspices of the DWP UIN Raden Mas Said Surakarta. Routine carry out activity weighing rubbish inorganic in every the month . Various circles has participate participate For deposit trash, start from DWP members, lecturers, employees , students , CS and public general .³⁶

Garbage bank active do activity education and campaigns about awareness environment through ambassador environment and volunteers, as well as Work The same with various party both internal and external external . Formation structure Waste Bank organization Incandescent Universe aim For ensure every activity management rubbish walk targeted, effective, and appropriate with the target that has been established. Structure This formed with consider function, responsibility answer, and division clear work between management as well as member.

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Various programs and activities innovative implemented For push awareness as well as participation public in management garbage. Among them is the NGOMPAS Talk Show (Chatting with Activists) Garbage) which presents discussion inspiring around issue environment , Environmental Ambassador program For form agent changes , and recruitment volunteers ready involved active in activity field . Besides Therefore, there is a Solo Day Resik agenda as action cleaning up city , charity program bottles and glasses plastic For raise funds support based donation garbage , until activity incidental such as seminars, meetings waste bank community , and workshops involving Work The same with various institutions to strengthen networks and impact positive management rubbish .³⁸

Management reception donation the trash that was found many come from from public around and from UIN Raden Mas Said Surakarta, with notes more from 8,400 kg of waste managed every year . This is explained by the waste bank incandescent universe, Mrs. Ika Feni Setianingrum say :

*It is known there the data that per year Can up to 8,400 kg of waste that we manage . This of course every our considerations for doing recap amount or forum the garbage that comes in, that of course done every periodically .*³⁹

Mrs. Ika Feni Setianingrum also said that weighing rubbish done at least every two Sunday once , but if amount rubbish Still little activity the done a month once . " *Garbage bank incandescent universe routine For stage weighing rubbish inorganic as much as two week and if quiet so weighing held One month very* " .⁴⁰

Nuning Hasanah also stated

*"We have a schedule deposit rubbish every Sunday. Customer bring rubbish sorted — plastic , paper , metal , and more . We weigh, record, and then save while. After collected Enough many, we deposit to collectors . Before that , we always look for information price from a number of collectors . The goal is to ensure the price optimal sales and results Can return for social programs, conservation environment, and welfare members. We also accompany this process education to children, so that since small they used to with culture sorting rubbish."*⁴¹

Based on documentation material about Waste Bank Management Incandescent Universe it is stated that implementation weighing rubbish inorganic every two week, and if condition

³⁵ Nuning Hasanah, "Pengelolaan Bank Sampah Pijar Semesta," 5 Agustus 2025.

³⁶ DWP UIN Raden Mas Said Surakarta, "Bank Sampah Pijar Semesta," DWP UIN Raden Mas Said Surakarta, Desember 2024.

³⁷ UIN Raden Mas Said Surakarta, "Bank Sampah Pijar Semesta."

³⁸ UIN Raden Mas Said Surakarta, "Bank Sampah Pijar Semesta."

³⁹ Ika Feni, "Implementasi Bank Sampah Pijar Semesta," August 4, 2005.

⁴⁰ Ika Feni, "Pengelolaan Bank Sampah Pijar Semesta," N.D.

⁴¹ Hasanah, "Pengelolaan Bank Sampah Pijar Semesta."

quiet like moment this, then done every a month once . At times certain, implemented a month twice .⁴²

Waste managed by a waste bank incandescent universe there is two type waste , organic and inorganic. For moment this is a trash bank incandescent universe Still focus in management rubbish inorganic. This is because of management rubbish organic Not yet maximum. This is has explained by the waste bank incandescent Mother Ika's universe Feni Setianingrung :

*"As far as This of course its management rubbish inorganic , now for the trash organic This new started to be talked about by mothers . So when This For management rubbish organic of course Not yet maximum done . So it's still There is management inorganic. Actually at UIN Surakarta, garbage organic it is very abundant , mothers . from the fallen leaves, that Can utilized For composting. But time That Already Once carry out a composting program , but Not yet sustainable ma'am. So new experiment once, there is dynamics and constraints , so that Not yet maximum like That ."*⁴³

Based on documentation material about Waste Bank Management Incandescent Universe Management Rubbish consists of from inorganic and organic . Inorganic done through various activities , including : socialization management rubbish through podcasts, social media , webinars, or talk show ; education sorting rubbish inorganic through discussion forums focus group (FGD) and training ; and weighing rubbish inorganic in a way periodically . Management Rubbish organic includes : socialization management rubbish organic ; education processing rubbish organic become product beneficial such as eco-enzyme and maggot; as well as manufacturing compost as effort utilization return waste organic .⁴⁴

Nuning Hasanah explain that implementation weighing rubbish done every One month once by the cleaning service officer. *" collection garbage is handled by the cleaning service at the faculty each day right collect trash, because Work they, if they have Lots weighed, a month "*⁴⁵

At each area, collector own different prices. Therefore that, Garbage Bank Incandescent Universe need moreover formerly search and compare price lists from a number of collectors , so they can give price best for its customers . This is delivered by Mrs. Nuning Hasanah who emphasized the importance of this strategy for the welfare of customers .

*"We are looking for information used to be in the neighborhood that , especially collector before . We usually ask for a price list from they "*⁴⁶

The price of garbage also goes hand in hand changed adapt price the market , at the waste bank incandescent semester have differentiated prices in accordance with type waste that is deposited .

Then from collection waste is determined by the price list from each type collected waste

*"The price of garbage no still , because follow fluctuations market price . In addition that , value the sale is also adjusted with type the waste that is deposited , so that management can walk fair and transparent for all party ."*⁴⁷

Related price and value sell collection rubbish this, Ika Feni also said that : *" Sale value rubbish nature dynamic , adaptable fluctuations market price and is influenced by the type of material deposited ."*⁴⁸

The "Pijar Semesta" Waste Bank at UIN Raden Mas Said Surakarta has implemented a structured waste management system, particularly through waste weighing activities. This process ensures that deposited waste is managed accurately while providing economic benefits for participants. The weighing scheme begins with collecting waste that has been previously

⁴² UIN Raden Mas Said Surakarta, "Bank Sampah Pijar Semesta."

⁴³ Feni, "Implementasi Bank Sampah Pijar Semesta."

⁴⁴ UIN Raden Mas Said Surakarta, "Bank Sampah Pijar Semesta."

⁴⁵ Nuning Hasanah, "Pengelolaan Bank Sapah Pijar Semesta," 5 Agustus 2025.

⁴⁶ Nuning Hasanah, "Strategi Bank Sapah Pijar Semesta," August 5, 2025.

⁴⁷ Hasanah, "Pengelolaan Bank Sapah Pijar Semesta."

⁴⁸ Ika Feni, "Implementasi Bank Sampah Pijar Semesta," Agustus 2025.

sorted by customers, followed by recording the type and weight of waste according to established categories. The results are then documented in administrative records or digital systems to determine the selling value and customer savings balance. This mechanism not only supports transparent and consistent waste management but also functions as an educational medium to increase public awareness regarding waste sorting and reduction from the source.

Activity scheme weighing rubbish started with collection waste that has been sorted by the community or members of the waste bank. Waste organic consisting of from waste originating from from creature alive , well plant and animals , which are easy decompose in a way natural.⁴⁹ The type covering remainder food such as rice, vegetables, side dishes, noodles, and bread; leftovers vegetables as well as fruits like banana peel , skin orange, stem kale , and skin potatoes; leaves dry or wet; remaining material kitchen experience like dregs coconut pulp sugar cane , skin onions, and lemongrass stalks; remaining animal like bones, fish bones, and shells eggs; and material organic other like powder saw wood natural, twig pieces, and flowers withered.⁵⁰ Garbage organic This own potential big For processed return become product useful , such as compost, eco-enzyme, or maggot feed, so that can reduce pile rubbish at a time support sustainability environment.⁵¹

Rubbish inorganic like waste originating from from non- biological materials or results processed difficult human decompose in a way experience in time short. The type including plastic and its derivatives like pocket plastic , bottles plastic , packaging food and drink ; metal like can drinks , cans food and equipment House ladder made from metal ; glass and its fragments like bottle glass , glasses and mirrors ; paper and cardboard like paper print , magazines , newspapers , and boxes packaging ; fabrics and textiles like clothes used , carpets , and curtains ; rubber such as used tires and sandals; as well as waste electronics (e-waste) such as batteries , cables , damaged cellphones , and components computer . Most of rubbish inorganic can utilized return through the recycling process repeat , so that its management need proper sorting For reduce pollution environment .

As college tall Islam Mother nuning explain :

*"Islam since beginning Already teach We For guard nature . In the Qur'an and hadith , many very order For No damage earth . Pillars like greening , cleanliness and maintenance balance environment it is very relevant with the waste bank program that we run . We view it No just activity social or economics , but also worship and trust ."*⁵²

As an Islamic higher education institution, UIN Raden Mas Said Surakarta views the "Pijar Semesta" Waste Bank not merely as an environmental initiative, but as a concrete implementation of Islamic values in preserving nature. Islam emphasizes environmental stewardship through principles such as cleanliness, ecological balance (mizan), conservation of natural resources, prevention of environmental damage, and responsibility as khalifah fil ardh (stewards of the earth). These values serve as guidelines for maintaining environmental sustainability and public welfare. Based on field observations, environmental education was implemented during the FEBI Bazaar through waste-sorting activities involving separate bins for paper, plastic, bottles, and organic waste. Students were guided to dispose of waste according to its category, fostering ecological awareness and responsible behavior. This initiative not only maintained event cleanliness but also educated participants about sustainable waste management aligned with Islamic teachings on cleanliness, responsibility, and environmental care.

⁴⁹ Prama Widayat et al., "Waste Bank: Model and Education of Organic and Non Organic Waste Processing in Riau Province;" paper presented at First International Conference on Science, Technology, Engineering and Industrial Revolution (ICSTEIR 2020), 2021, <https://doi.org/10.2991/assehr.k.210312.062>.

⁵⁰ Yunmei Wei et al., "Environmental Challenges Impeding the Composting of Biodegradable Municipal Solid Waste: A Critical Review," *Resources, Conservation and Recycling* 122 (July 2017): 51–65, <https://doi.org/10.1016/j.resconrec.2017.01.024>.

⁵¹ Henning Friege and Yasmin Eger, "Best Practice for Bio-Waste Collection as a Prerequisite for High-Quality Compost," *Waste Management & Research: The Journal for a Sustainable Circular Economy* 40, no. 1 (2022): 104–10, <https://doi.org/10.1177/0734242X211033714>.

⁵² Hasanah, "Pengelolaan Bank Sapah Pijar Semesta."

For see to what extent students play a role in activity this , the following served indicator involvement they in management of the " Pijar " Waste Bank Universe .”

Table 1. Indicators Involvement Student in Waste Bank Management Incandescent Universe

| Aspects | | Ponorogo | |
|---------|-------------------------------|---|--|
| 1 | Participation Direct | Amount students who become customers active waste bank | Students who are routine deposit rubbish inorganic (plastic , paper , metal) to the Waste Bank Incandescent Universe |
| | | Amount students who become volunteers or ambassador environment | Students who are members as agent education and awareness promoter campus environment |
| 2 | Activity Education & Campaign | Student involved in activity such as : talk shows , webinars, podcasts, training , workshops | Become participants , committee , or source person in activity themed management waste and sustainability environment |
| 3 | Development Academic | Amount thesis , assignments end , or project lectures that raise theme management rubbish or trash bank | Student make this program as object study , research , or development solution environment |
| | | Amount organization collaborating students in activity environment | Involvement of BEM, Association Student Departments , UKM, etc. , in educational programs or action clean environment |
| 4 | Community service | Involvement student in Thematic / Transformative KKN themed management rubbish | Student integrate waste bank activities in the village service program or partners public campus |
| 5 | Change Behavior | Improvement amount students who sort rubbish in accordance its type | Seen from practice in activities campus (for example at the FEBI bazaar, other campus events) and documentation sorting rubbish |
| 6 | Media & Publications | Amount content educational made students on social media related to waste banks | Posts , videos, podcasts, or articles written by students For disseminate awareness environment |

Source: Author's Review, 2025

Involvement student is factor key in success management of the " Pijar " Waste Bank Universe ” as part from campus program implementation Green at UIN Raden Mas Said Surakarta. Participation active student No only reflect concern to cleanliness environment , but also become means learning practical about not quite enough answer ecological based Islamic values .

IMPLEMENTATION OF THE ECOLOGICAL VALUES OF YUSUF AL-QARDHAWI'S FIQH AL-BI'AH IN ENVIRONMENTAL MANAGEMENT LITERACY OF ISLAMIC HIGHER EDUCATION

Environmental degradation that is becoming increasingly complex requires a comprehensive approach that is not only scientific in nature but also grounded in moral and spiritual values. In the context of implementing waste management through the “Pijar Semesta” Waste Bank to support the green campus program at UIN Raden Mas Said Surakarta, Yusuf al-Qardhawi’s concept of *fiqh al-bi’ah*⁵³ (Islamic environmental jurisprudence) offers an ecological perspective rooted in Islamic teachings. This perspective emphasizes human responsibility as *khalifah* (stewards) to maintain environmental balance. Ecological values such as responsibility, balance (*mizan*), prohibition of environmental destruction, and moderation in utilizing natural resources are highly relevant for strengthening environmental literacy in Islamic higher education. Through this literacy reinforcement, universities are expected to become centers for developing Islamic ecological awareness that integrates knowledge, technology, ethics, spirituality, and environmental sustainability.

The implementation of the “Pijar Semesta” Waste Bank management at UIN Raden Mas Said Surakarta began with the establishment of the Pijar Semesta Waste Bank organization on January 3, 2022, as a strategic initiative to strengthen the university’s commitment to the green campus program based on Islamic values. Initiated by the academic community, this program reflects a collective awareness that waste management is not merely a technical issue, but also a moral and spiritual responsibility. This perspective aligns with Islamic environmental values, including cleanliness (*an-nadhafa*), human responsibility as *khalifah fil ardh* (stewards of the earth), and the spirit of mutual cooperation. These principles are evident in the active involvement of various campus elements in developing and sustaining the waste management system from its inception.⁵⁴

Second, the establishment of the organizational structure of the “Pijar Semesta” Waste Bank at UIN Raden Mas Said Surakarta represents a crucial element in ensuring the sustainability and operational effectiveness of the program. The organizational structure consists of supervisors from university leadership, a chairperson, secretary, treasurer, field coordinators, an education division, and a waste processing division, reflecting a well-organized management system. The involvement of university leaders as supervisors demonstrates strong institutional support, which is essential for providing legitimacy, policy direction, and resource assistance. Meanwhile, the clear division of roles enables more efficient coordination in implementing operational activities, including environmental education, waste collection, sorting, and waste processing.⁵⁵

The organizational structure of the “Pijar Semesta” Waste Bank at UIN Raden Mas Said Surakarta plays an important role in ensuring effective environmental management based on Islamic values. In Islam, humans are entrusted as *khalifah fil ardh* (stewards of the earth) responsible for preserving environmental sustainability, as emphasized in QS. Al-Isra’: 44 and QS. Al-A’raf: 56. The organizational structure consisting of advisors, chairperson, secretary, treasurer, coordinators, and waste management divisions reflects the principles of *amanah* (trust), responsibility, and cooperation. Furthermore, the *fiqh* principle of *la dharar wa la dhirar* provides an ethical foundation for preventing environmental damage. Through cleanliness, ecological balance (*mizan*), and resource preservation, the waste bank embodies Islamic teachings in promoting sustainability, public welfare, and environmental responsibility.⁵⁶

⁵³ Syamsul Hilal and Ersi Sisdiyanto, “Fiqh Bi’ah Analysis on Social Environmental Audit,” *MALIA: Journal of Islamic Banking and Finance* 8, no. 2 (2024): 129–42, <https://doi.org/10.21043/malia.v8i2.29448>.

⁵⁴ al-Qordhowi, *Ri’ayatul Biah Fi Syari’atil Islam* (Darussyuruq, 2021).

⁵⁵ Mulyawan Safwandy Nugraha, dkk, *Manajemen Perguruan Tinggi* (CV Megra Press Nusantara, 2025).

⁵⁶ al-Qordhowi, *Ri’ayatul Biah Fi Syari’atil Islam* (Kairo, Mesir: Darussyuruq, 2021).

Third, Third, socialization and environmental education are fundamental pillars in the implementation of the “Pijar Semesta” Waste Bank at UIN Raden Mas Said Surakarta. Through activities such as seminars, the FEBI Bazaar, social media campaigns, educational posters, and routine training, the program promotes ecological awareness and encourages behavioral change within the academic community. The education provided is practical, particularly in teaching waste sorting between organic and inorganic materials. Continuous environmental education strengthens sustainable learning and encourages consistent environmental practices in daily life. This strategy aligns with Carlo M. Punongbayan et al., who found that environmental awareness significantly influences waste sorting, reduction, and recycling behavior, while also reinforcing environmental literacy and stakeholder participation in supporting green campus sustainability.⁵⁷

From the perspective of behavioral change and environmental education, the implementation of the “Pijar Semesta” Waste Bank at UIN Raden Mas Said Surakarta is consistent with Muljaningsih’s findings, which demonstrate that knowledge of waste management significantly increases individuals’ intentions and active participation in waste sorting and recycling practices. UIN Raden Mas Said Surakarta applies a similar approach through seminars, bazaars, social media campaigns, educational posters, and routine training programs that strengthen environmental awareness and encourage active involvement within the academic community. This educational strategy also reflects Islamic principles emphasizing the importance of knowledge (ta’lim wa tarbiyah), righteous action, and responsibility toward the environment. In Islam, the dissemination of knowledge is regarded as a noble act, as stated in the hadith of the Prophet Muhammad SAW: “Whoever follows a path in search of knowledge, Allah will make easy for him a path to Paradise” (HR. Muslim). Environmental education activities carried out by the Pijar Semesta Waste Bank therefore represent not only information dissemination but also a form of da’wah through practical action. Encouraging waste sorting and environmental care embodies the Islamic teaching that cleanliness is part of faith (an-nazhafah min al-iman) and reflects the principle of ihsan in preserving the earth as a trust from Allah SWT. Thus, the program serves as an actualization of Islamic ecological values rooted in faith, knowledge, and moral responsibility to ensure environmental sustainability for future generations.⁵⁸

Fourth, the customer registration system of the “Pijar Semesta” Waste Bank at UIN Raden Mas Said Surakarta demonstrates an inclusive and participatory approach, enabling all members of the academic community including students, lecturers, staff, and cleaning service personnel to actively engage in inorganic waste management.⁵⁹ The waste collection process conducted regularly by cleaning service staff in each faculty strengthens the operational structure of the waste bank by integrating campus sanitation personnel into a systematic and organized collection mechanism. Customer registration serves as an important initial step in fostering individual awareness and long-term participation in environmental management. The active involvement of all campus elements aligns with the findings of Carlo M. Punongbayan et al., which emphasize that community participation in waste bank management increases environmental awareness, creates economic value, and supports operational sustainability. Furthermore, the involvement of cleaning service personnel reflects the collaborative governance approach highlighted by Fatmawati et al., which stresses the importance of multi-stakeholder collaboration in strengthening operational systems and ensuring that waste management activities are conducted consistently, effectively, and sustainably.

The customer registration system of the “Pijar Semesta” Waste Bank at UIN Raden Mas Said Surakarta, which involves all elements of the academic community, reflects Islamic values of

⁵⁷ Punongbayan et al., “Waste Management Practices of an Educational Institution.”

⁵⁸ Sri Muljaningsih et al., “Intention Model of Waste Management Education Concept Based on Green Campus in Brawijaya University,” *Jurnal Pembangunan Dan Alam Lestari* 9, no. 2 (2018): 129–39, <https://doi.org/10.21776/ub.jpil.2018.009.02.10>.

⁵⁹ Ismaila Rimi Abubakar et al., “Environmental Sustainability Impacts of Solid Waste Management Practices in the Global South,” *International Journal of Environmental Research and Public Health* 19, no. 19 (2022): 12717, <https://doi.org/10.3390/ijerph191912717>.

musyarakah (cooperation) and ukhuwah (brotherhood) in promoting collective goodness. Islam strongly emphasizes mutual assistance in righteous actions, as stated in the Qur'an: "And cooperate in righteousness and piety, but do not cooperate in sin and aggression" (QS. Al-Ma'idah: 2). The active participation of students, lecturers, staff, and cleaning service personnel in waste management activities fosters a spirit of ta'awun (mutual cooperation) in preserving environmental sustainability. In Islamic teachings, humans are entrusted as khalifah fil ardh (stewards of the earth) who bear responsibility for maintaining ecological balance and preventing environmental destruction (QS. Al-A'raf: 56). Therefore, participation in waste management is not only an ecological responsibility but also a form of social worship (amal jariyah) that provides long-term benefits for society. Furthermore, the involvement of cleaning service personnel reflects the Islamic principle of al-'adl (social justice), where every role is recognized and valued as an essential part of an interconnected and sustainable environmental management system.⁶⁰ With Thus, the system registration customers This reflect implementation real from Islamic values about collaboration, justice, responsibility responsibility and concern to environment as trust from Allah SWT.

Fifth, Activities sorting waste by customers in Waste Bank system Incandescent The universe of UIN Raden Mas Said Surakarta shows existence role active individual in management responsible waste responsible and sustainable. This process No only involving action collect and sort rubbish in accordance category inorganic and organic, but also demanding awareness and accuracy customers in ensure that sorting done with correct. Sorting This in harmony with Susanto et al.'s theory that one of the waste bank management models that is implemented integrate technology information is channel sorting, bookkeeping, and distribution deposit trash, which makes it easier management rubbish in a way more efficient. In sorting This customer's responsible answer inspect rubbish before deposited so as not to happen mixing, which can inhibit the recycling process repeat or processing more continue. Special For rubbish organic, the presence of directions for process it become compost show that management rubbish No only oriented towards disposal, but also towards utilization return in a way ecological. Practice this also reflects approach Donna Asteria⁶¹ and Herdis Herdiansyah⁶² namely based 3R principle (Reduce, Reuse, Recycle) and supports development culture aware environment in the environment campus. With involving customers in a way direct, system This push change behavior going to management more trash independent, participatory, and sustainable.

In Islamic perspective, activities sorting waste by Waste Bank customers Incandescent Universe reflect mark trust (responsibility) answer) and ihsan (doing) kindness with as best as possible) in guard environment.⁶³ Islam teaches that humans are created as khalifah fil ardh (stewards of the earth)⁶⁴ who bear responsibility for preserving and protecting the environment from destruction. Allah SWT states: "And do not cause corruption on the earth after it has been set in order" (QS. Al-A'raf: 56). In this context, careful and disciplined waste sorting represents a concrete manifestation of obedience to this divine trust. Through simple actions such as separating and managing waste responsibly,⁶⁵ individuals contribute to maintaining ecological balance as part of Allah SWT's creation. Furthermore, the 3R principles (Reduce, Reuse, Recycle) are closely aligned with the Islamic concept of avoiding israf (excessiveness and wastefulness), as

⁶⁰ al-Qordhawi, *Ri'ayatul Biab Fi Syari'atil Islam* (Kairo, Mesir: Darussyuruq, 2021).

⁶¹ Donna Asteria and Herdis Herdiansyah, "The Role of Women in Managing Waste Banks and Supporting Waste Management in Local Communities," *Community Development Journal* 57, no. 1 (2022): 74–92, <https://doi.org/10.1093/cdj/bsaa025>.

⁶² Asteria and Herdiansyah, "The Role of Women in Managing Waste Banks and Supporting Waste Management in Local Communities."

⁶³ al-Qordhawi, *Ri'ayatul Biab Fi Syari'atil Islam* (Kairo, Mesir: Darussyuruq, 2021).

⁶⁴ Faisal Eriza et al., "Islamic Ethics in Waste Management to Prevent Environmental Damage: A Fatwa Perspective of the Indonesian Ulema Council," *ISVS E-Journal* 11, no. 01 (2024): 159–70, <https://doi.org/10.61275/ISVSej-2024-11-01-10>.

⁶⁵ Maskun et al., "Legal Framework Model for Sustainable Solid Waste Management in Indonesia: A Contemporary Environmental Fiqh Perspective," *MILRev: Metro Islamic Law Review* 4, no. 2 (2025): 1097–122, <https://doi.org/10.32332/milrev.v4i2.11104>.

Islam encourages people to use natural resources wisely and responsibly. Allah SWT says: "Indeed, Allah does not love those who are excessive" (QS. Al-A'raf: 31). Therefore, waste sorting and composting activities are not merely ecological practices, but also spiritual acts that reflect gratitude and responsibility toward the blessings of nature granted by Allah SWT. Such practices represent a form of righteous social action (*amal shalih*) that supports environmental sustainability while strengthening ecological awareness rooted in Islamic values.

Sixth, Activities deposit rubbish to the Trash Bank Incandescent Universe is part important in chain system management structured and responsible waste answer in this process, the role of waste bank officer do verification to results sorting carried out by customers. Waste identified organic will directed For processing become compost or eco-enzyme, which reflects commitment to management waste based sustainable and friendly environment. Meanwhile that, trash inorganic which has sorted in accordance its type saved For for sale to collectors, giving mark economical at a time reduce burden discarded garbage to the landfill.

In Islamic perspective, activities deposit trash at the Trash Bank Incandescent Universe reflect implementation principle *tawazun* (balance) and *maslahah* (benefit) in management environment. Islam emphasizes that all activity humans on earth must guard balance between need economic, social, and sustainability nature, as the word of Allah SWT: "And Allah has elevate the sky and Him put balance (balance), so that You Don't damage balance that." (QS. Ar-Rahman: 7–8). The process of verification, sorting, and processing rubbish become compost or eco-enzyme is form real from effort guard balance the avoid *ifsad fil-ardh* (damage on earth) at once create benefit for environment and society.⁶⁶

Besides that, activity deposits that generate mark economy show implementation principle benefit *mursalah*, namely all efforts that bring benefit for people without cause harm. Management waste that produces mark economic and social in line with Islamic teachings about *ihya' al-ardh* (bringing life to life) earth), namely optimize source Power natural without damage it. Use results rubbish organic For compost and eco-enzyme also reflect trust man as a caliph who utilizes source Power with wise and responsible answer. With Thus, the activities deposit rubbish No only activity environment only, but also social worship that contains spiritual values, because reflect obedience to God's command to guard earth, spread benefits, and avoidance damage.⁶⁷

Seventh, The weighing and recording process in the "Pijar Semesta" Waste Bank system at UIN Raden Mas Said Surakarta plays a crucial role in ensuring transparency, accountability, and professionalism in waste management. Detailed weighing and documentation of each waste category and transaction support accurate monitoring, strengthen organizational accountability, and reflect the principles of transparent and responsible public management.

In the Islamic perspective, the weighing and recording process within the "Pijar Semesta" Waste Bank system at UIN Raden Mas Said Surakarta reflects the implementation of the values of honesty (*ṣidq*), justice (*ʿadl*), and trustworthiness (*amanah*) in environmental management activities. Islam strongly emphasizes fairness and accuracy in every transaction, as stated in QS. Al-A'raf: 85: "Give full measure and weight in justice, and do not deprive people of their rights." This teaching indicates that accurate weighing and transparent recording are not merely technical procedures but also moral and spiritual responsibilities. Furthermore, systematic documentation reflects the Islamic principle of *hisbah*, which emphasizes supervision and accountability to ensure justice and integrity in social and economic activities. Therefore, the weighing and recording practices implemented in the waste bank represent a concrete application of Islamic ethical values in transparent, fair, and accountable environmental governance.

Eighth, the calculation of waste value within the "Pijar Semesta" Waste Bank system at UIN Raden Mas Said Surakarta reflects the principles of transparency, accountability, and empowerment in environmentally based financial management. Each waste transaction is

⁶⁶ al-Qordhowi, *Ri'ayatul Biah Fi Syari'atil Islam* (Kairo, Mesir: Darussyuruq, 2021).

⁶⁷ Hilal and Sisdianto, "Fiqh Bi'ah Analysis on Social Environmental Audit."

carefully recorded by the treasurer, while the results of waste weighing are directly converted into savings balances for each customer. Through options to save or withdraw balances, participants gain flexibility in managing economic benefits derived from waste management activities. The use of systematic and digital recording mechanisms, including computerized systems and potential integration with IoT-based scales or QR code applications, enhances public trust and minimizes the risk of manipulation, in line with principles of good governance. In the Islamic perspective, this system embodies the values of amanah (trustworthiness), 'adl (justice), and shafāfiyyah (transparency). This is consistent with QS. Al-Isra': 35, which emphasizes honesty and fairness in measurement and transactions as moral and spiritual responsibilities before Allah SWT.

System transparent digital recording is also in line with the value of hisbah in Islam, namely supervision for ensure all activity walk in accordance principle honesty and welfare. Giving book savings to customers can interpreted as form tawazun (balance) between concern environment and empowerment economy, so that activity management rubbish No only impact ecological but also socio-economic. Through system This is the Islamic values about efficiency, accountability, and fairness implemented in a way real show that management good environment in fact is manifestation from obedience to Allah SWT in guard trust earth and uphold justice in every aspect life.

Ninth, the sale of recyclable waste to collectors represents the final stage in the inorganic waste management cycle of the "Pijar Semesta" Waste Bank at UIN Raden Mas Said Surakarta and plays a significant role in supporting the circular economy and environmental sustainability. Waste that has been properly sorted and collected is distributed to recycling collectors for further processing and reuse, thereby reducing the amount of waste ending up in landfills (TPA) while generating economic value for both the waste bank and its customers. Collaboration with collectors strengthens the recycling chain and contributes to the development of a sustainable campus-based⁶⁸ waste management system. From an Islamic perspective, this cooperation reflects the principle of ta'awun 'alal birri wat-taqwā (mutual assistance in righteousness and piety) as emphasized in QS. Al-Māidah: 2. Furthermore, the recycling process embodies the spirit of iṣlāḥ (environmental improvement) by restoring the value and benefits of resources that might otherwise be wasted. This practice also aligns with the objectives of maqāṣid al-sharī'ah, particularly in protecting wealth (ḥifẓ al-māl) and preserving life (ḥifẓ al-nafs), since effective waste management prevents pollution and supports sustainable, productive, and socially beneficial economic activities rooted in Islamic environmental ethics.

Tenth, the utilization of proceeds from recyclable waste sales at the "Pijar Semesta" Waste Bank at UIN Raden Mas Said Surakarta reflects sustainability-oriented management grounded in Islamic values. The funds are allocated to support waste bank operations, environmental education programs, and incentives for customers, ensuring both ecological and social benefits. In the Islamic perspective, natural resources are considered a trust (amanah) from Allah SWT that must be managed responsibly for public welfare (maslahah 'ammah) and environmental preservation. This system also reflects the principles of justice and equitable distribution by rewarding participants according to their contributions. Therefore, the waste bank represents an ethical Islamic circular economy model integrating spiritual, social, economic, and ecological values to achieve sustainability and collective welfare.

Eleventh, Reporting activities, finances, and achievements Garbage Bank Incandescent Universe in a way periodic aim For ensure transparency, accountability, and evaluation program performance or project. This is in harmony with theory accountability, transparency organization, and the principles of good governance. Accountability demand organization For responsible answer on use source power and achievement goals, which are realized through reporting finance and activities in a way routine to stakeholders interest. Transparency in

⁶⁸ Ana Ares-Pernas et al., "Towards a Sustainable Campus: Working Together to Achieve the Green Campus Flag on the UDC Peripheral Campus of Ferrol," *International Journal of Sustainability in Higher Education* 21, no. 7 (2020): 1367–90, <https://doi.org/10.1108/IJSHE-02-2020-0056>.

reporting strengthen trust between waste bank managers , parties campus and partners supporters , as well as push participation and support sustainable .

Periodic reporting of activities, finances, and achievements within the “Pijar Semesta” Waste Bank at UIN Raden Mas Said Surakarta reflects Islamic values of trustworthiness (amanah), honesty (šidq), and responsibility (mas’uliyah). In Islam, leadership and management are considered mandates accountable before Allah SWT, as emphasized in the hadith narrated by Bukhari and Muslim. Transparent reporting also aligns with QS. Al-Baqarah: 282, which stresses accurate record-keeping. Therefore, routine reporting functions not only as administrative accountability but also as an implementation of Islamic ethical principles in sustainable environmental governance.

Based on results findings research, the following served implementation model design management of the " Pijar " Waste Bank the Universe” that reflects implementation values Ecological Fiqh al- Bi'ah Yusuf al- Qardhawi at UIN Raden Mas Said Surakarta.

Table 2. Implementation Model Management of the " Pijar " Waste Bank The Universe " Based on Ecological Values of Fiqh al- Bi'ah Yusuf al- Qardhawi at UIN Raden Mas Said Surakarta

| | Stages Implementat ion | Element Key | Reflected Islamic Values |
|---|--|--|--|
| 1 | Formation Organization | Initial Commitment to Green Campus | An- Nadhafah (Cleanliness), Khalifah fil Ardh (Spiritual & Moral Responsibility), Mutual Cooperation (Ta'awun) |
| 2 | Formation Structure Organization | Support Institutional Leader Campus (Supervisor), Division of Labor (Chairman , Section Education , etc.) | Amanah (Responsibility), Al- Adl (Justice / Division of Roles) |
| 3 | Socialization and Education | Campus Events (Bazaars, Seminars), Social Media , Posters, Training Sorting (Organic / Inorganic) | Ta'lim wa Tarbiyah (Cleanliness is Part Dissemination) Science), Da'wah Bill Hal (Delivery message through action), An- Nazhafah minal Iman (Cleanliness is Part of Faith) |
| 4 | Registration Customer | Inclusivity (Students , Lecturers , Staff , Cleaning Service), Multistakeholder Involvement | Musarakah & Ukhuwah (Cooperation & Brotherhood in Goodness), Ta'awun (Mutual Cooperation), Khalifah fil Ardh (Collective Responsibility) |
| 5 | Sorting Trash by Customers | Sorting independent (organic and non- organic) | Trust & Ihsan (Responsibility & Doing Kindness with Best), Prohibition Israf (No Exaggeration) |
| 6 | Deposit Rubbish | Verification Officer , Processing Organic (Compost /Eco- Enzyme), Storage Inorganic | Tawazun (Balance) Environment - Economy), Maslahah (Benefits) General), Ihya ' al- Ardh (Bringing Life to Life) Earth) |

| | | | |
|----|--------------------------------|---|---|
| 7 | Weighing and Recording | Weighing Accurate , Recording per Type Professionalism | Ş idq (Honesty), ' Adl (Justice), Amanah, Hisbah (Supervision) Social For Justice) |
| 8 | Waste Value Calculation | Conversion Balance to Account Customers , Options Tube /Pull, Digital Transparency | ' Adl (Justice) in Transactions), Shafāfiyyah (Transparency), Tawazun (Economic & Environmental Balance) |
| 9 | Sale Rubbish to Collector | Circulation , Cycle Repeat , Landfill Volume Reduction | Ta'āwun ' alal Birri wat- Taqwā (Helping each other in Goodness), Ihyā ' al- Ardh (Repair) Earth), Islāh (Improvement) |
| 10 | Utilization of Sales Proceeds | Education Fund Environment , Incentives Customer | Amanah, Maslahah ' Ammah (Mutual Benefit), Khalifah fi al- Ardh (Management) Source Power with Wise), Al- Adl (Justice) Distribution) |
| 11 | Reporting Activities & Finance | Reporting Periodic (Activities , Finance , Achievements), Transparency & Accountability | Amanah, Ş idq (Honesty), Mas'uliyah (Responsibility). |

Source: Author's Review, 2025

This research has several similarities with previous studies concerning environmental management and waste bank implementation in higher education institutions. Previous research generally emphasized the importance of community participation, environmental education, waste sorting practices, recycling activities, and the role of waste banks in supporting green campus programs. Studies conducted by researchers such as Carlo M. Punongbayan,⁶⁹ Sri Muljaningsih,⁷⁰ Donna Asteria,⁷¹ and Fatmawati also highlighted that environmental awareness, active participation, and collaborative governance are essential factors in achieving sustainable waste management systems. Similar to those studies, this research confirms that the involvement of students, lecturers, staff, and campus stakeholders plays a significant role in strengthening environmental literacy and creating a sustainable academic environment. Furthermore, this study also supports previous findings that environmental education through seminars, campaigns, social media, and practical activities can encourage behavioral changes toward more responsible waste management practices.

However, this research differs fundamentally from previous studies in terms of its conceptual and theoretical approach. Most earlier studies mainly focused on technical, managerial, economic, and behavioral aspects of waste management and green campus implementation.⁷² Environmental management⁷³ was generally analyzed from the perspectives of

⁶⁹ Punongbayan et al., “Waste Management Practices of an Educational Institution.”

⁷⁰ Sri Muljaningsih and Ajeng Kartika Galuh, “Intention Model of Waste Management Education Concept Based on Green Campus in Brawijaya University,” *Jurnal Pembangunan Dan Alam Lestari* 9, no. 2 (2018), <https://doi.org/10.21776/ub.jp.al.2018.009.02.10>.

⁷¹ Donna Asteria and Herdis Herdiansyah, “The Role of Women in Managing Waste Banks and Supporting Waste Management in Local Communities,” *Community Development Journal* 57, no. 1 (2022): 74–92, <https://doi.org/10.1093/cdj/bsaa025>.

⁷² Antje Disterheft et al., “Environmental Management Systems (EMS) Implementation Processes and Practices in European Higher Education Institutions – Top-down versus Participatory Approaches,” *Journal of Cleaner Production* 31 (August 2012): 80–90, <https://doi.org/10.1016/j.jclepro.2012.02.034>.

⁷³ Subhasish Das et al., “Solid Waste Management: Scope and the Challenge of Sustainability,” *Journal of Cleaner Production* 228 (August 2019): 658–78, <https://doi.org/10.1016/j.jclepro.2019.04.323>.

operational effectiveness, community participation, collaborative governance, or environmental education.⁷⁴ In contrast, this research introduces a more holistic and integrative perspective by incorporating the ecological values of Fiqh al-Bi'ah developed by Yusuf al-Qardhawi into the management model of the "Pijar Semesta" Waste Bank at UIN Raden Mas Said Surakarta. This study does not merely view waste management as a technical environmental activity, but also as a manifestation of Islamic ethical, spiritual, and theological responsibility. The concepts of khalifah fil ardh, amanah, tawazun, maslahah, and ihya' al-ardh are systematically integrated into every stage of environmental management, including organizational formation, socialization, waste sorting, waste deposit, financial transparency, and reporting systems.

The novelty of this research lies in the formulation of an Islamic-based environmental literacy management model grounded in the ecological principles of Fiqh al-Bi'ah. Unlike previous studies that separated environmental management from spiritual dimensions, this study integrates Islamic ethics, spirituality, and ecological jurisprudence into sustainable campus governance. Through the implementation of the "Pijar Semesta" Waste Bank at UIN Raden Mas Said Surakarta, the research demonstrates that waste management functions not only as an ecological and economic activity but also as a form of social worship and moral responsibility. This study fills the research gap by providing empirical evidence that Islamic ecological values can strengthen sustainable environmental management in Islamic higher education institutions.

CONCLUSION

Based on the findings above, it can be concluded that the implementation of the ecological values of Fiqh al-Bi'ah proposed by Yusuf al-Qardhawi in the management of the "Pijar Semesta" Waste Bank at UIN Raden Mas Said Surakarta reflects a successful integration between modern environmental management practices and Islamic principles. Each stage of waste bank management, including organizational formation, socialization, customer registration, waste sorting, waste collection, weighing, and reporting, demonstrates the application of Islamic values such as amanah (trustworthiness), justice, responsibility, balance (mizan), and mutual cooperation in goodness (ta'awun). This program not only contributes to ecological sustainability through waste reduction and the improvement of campus cleanliness, but also generates educational and spiritual impacts by strengthening ecological awareness among the academic community regarding their responsibility as khalifah (stewards) of the earth.

Furthermore, this study recommends that the "Pijar Semesta" Waste Bank program continue to be expanded and integrated into Islamic-based environmental education curricula. Strengthening collaboration with external institutions and developing digital innovations in waste management systems are also necessary to enhance the effectiveness and sustainability of the program. In addition, greater emphasis should be placed on environmental education and research initiatives to ensure that Islamic ecological literacy becomes an integral part of campus culture. Through these efforts, UIN Raden Mas Said Surakarta has the potential to become a model of a sustainable green campus that successfully integrates knowledge, faith, and ethical action in environmental preservation.

⁷⁴ Florence Barbara Awino and Sabine E. Apitz, "Solid Waste Management in the Context of the Waste Hierarchy and Circular Economy Frameworks: An International Critical Review," *Integrated Environmental Assessment and Management* 20, no. 1 (2024): 9–35, <https://doi.org/10.1002/icam.4774>.

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