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The Qur'ānic Green Campus Model in Islamic Higher Education Indonesia

Koraniczny model zielonego kampusu w islamskim szkolnictwie wyższym w Indonezji

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Abstract: This paper aims to explore the concept of Qur'ānic ecology and its relevance to the green campus concept in Islamic Higher Education Indonesia. This research is a qualitative with object study green campus practices at *Universitas Islam Negeri* (UIN) State Islamic University Walisongo, Semarang, and *Universitas Islam Negeri* (UIN) State Islamic University Raden Intan Lampung. The selection of these two universities is based on the release from UI GreenMetric which identify them as part of the top institutions in terms of green campus management. The paper argues the integration of Qur'ānic teachings on ecology and the green campus concept would be a new model of approach in protecting the environment as well as promoting a sustainable campus in Islamic higher education institutions. The Qur'ānic Green Campus is an innovative approach that integrates the Qur'ānic values on the environment with UI GreenMetric formulation. The results of this research aim to demonstrate that Qur'ānic teachings are not limited to discussions of eschatological matters but also encompass ecological insights to safeguard the continuity of life on the earth.

Keywords: Qur'ānic Ecology, Islam and Ecology, Religion and Ecology, green campus, sustainable campus, sustainability

Streszczenie: Niniejszy artykuł ma na celu zbadanie idei ekologicznych zawartych w Koranie i ich znaczenia dla koncepcji zielonego kampusu w islamskim szkolnictwie wyższym w Indonezji. Artykuł przedstawia wyniki badań jakościowych dotyczących praktyk stosowanych na zielonym kampusie na Universitas Islam Negeri (UIN) State Islamic University Walisongo, Semarang i Universitas Islam Negeri (UIN) State Islamic University Raden Intan Lampung. Wybór tych dwóch uniwersytetów został dokonany na podstawie publikacji UI GreenMetric, w której zostały one zaliczone do grona najlepszych instytucji pod względem zarządzania zielonym kampusem. Autorzy artykułu argumentują, że włączenie myśli koranicznej dotyczącej środowiska do koncepcji zielonego kampusu mogłoby pozwolić na stworzenie nowego modelu podejścia do ochrony środowiska, a także służyć promowaniu idei zrównoważonego kampusu w islamskich instytucjach szkolnictwa wyższego. Zielony kampus oparty na zasadach Koranu to innowacyjne podejście, które integruje wartości Koranu dotyczące środowiska z formułą UI GreenMetric. Wyniki przeprowadzonych badań mają na celu wykazanie, że nauki Koranu nie ograniczają się do dyskusji na temat kwestii eschatologicznych, ale obejmują również myśli ekologiczne, aby chronić ciągłość życia na ziemi.

Słowa kluczowe: Ekologia Koranu, Islam i ekologia, Religia i ekologia, zielony kampus, zrównoważony kampus, zrównoważony rozwój

Introduction

The Qur'ān's perspective on the environment offers a concept of environmental stewardship based on Qur'ānic values to promote environmentally friendly behaviour. Among the key insights on ecological sustainability found in the Qur'ān are the prohibition against damaging ecosystems (Q.S. al-Baqarah/2:11), the command to maintain balance (Q.S. al-Isrā' /17:26-27), and the mandate to cultivate and prosper the earth (Q.S. Hūd/11:61). These demonstrate that the Qur'ān addresses not only concepts of divinity, worship rituals, and legal categories such as *ḥalāl* and *ḥarām*, but also environmental concerns, which have become a serious focus for global communities.

Environmental issues have become major challenges for modern society, including global warming, biodiversity loss, plastic pollution, air pollution, deforestation, overfishing, land subsidence, and many others (Robinson 2024). These examples of environmental problems are clear evidence of how the current state of the environment has become a collective responsibility for humanity to safeguard the sustainability of the Earth. Protecting the environment means protecting the future of the planet. Therefore, it is crucial to promote an environmentally oriented way of life to ensure the sustainability of life on Earth.

One of the environmental concepts that has been developed and is expected to serve as a prototype for sustainable living in society is the "green campus" initiative, which involves managing universities based on environmental principles. The success of higher education institutions in designing and implementing the green campus concept is considered to have the potential to contribute significantly to the development of a sustainable society(Anthony Jnr 2021, 2). This statement is also supported by the findings of Tiyarattanachai and Hollman, who noted that stakeholders who study at green campus institutions experience a higher quality of life compared to those at campuses that do not adopt the green campus concept (Tiyarattanachai and Hollmann 2016, 6–14). This demonstrates that integrating environmental paradigms into campus management contributes significantly to fostering environmentally conscious behaviour among the campus community. Efforts to integrate environmental values into campuses reflect growing awareness of sustainability's importance. However, green campus initiatives face challenges, including limited knowledge, awareness, funding, infrastructure, time, leadership commitment, bureaucracy, and competing priorities. Hamed Gholami et al. identify the lack of knowledge about the green campus concept as the most significant barrier (Gholami et al. 2020, 4–6). This indicates that implementing the green campus paradigm requires seriousness, commitment, and participation from all stakeholders.

In the context of Indonesia, one university that is focused on green campus issues and has developed indicators to assess the extent of higher education institutions' commitment to environmental implementation is Universitas Indonesia with its UI GreenMatric program. This program aims to create a ranking based on the commitments and actions of universities regarding greening and environmental sustainability, utilizing 39 indicators across 6 criteria ("Welcome to UI GreenMetric – UI GreenMetric" n.d.). In its 2023 release, UI GreenMatric ranked Universitas Indonesia as the top green campus in the university category in Indonesia, followed by Universitas Diponegoro, Universitas Gadjah Mada, IPB University, and Universitas Negeri Semarang. Among the State Islamic Universities, Universitas Islam Negeri (UIN) State Islamic University Raden Intan Lampung held the 9th position, followed by UIN Sultan Thaha Saifuddin Jambi in 27th place, UIN Raden Fatah, Palembang in 34th place, and UIN Walisongo Semarang in 36th place (*Overall Rankings 2023 – UI Green Metric* n.d.). Based on the data, this study would focus on examining Islamic state universities in implementing the green campus concept, specifically

UIN Raden Intan Lampung and UIN Walisongo. Nationally, among all universities in Indonesia, they rank 9th and 36th, respectively. However, in the category of Islamic state universities, they hold the 1st and 4th positions at the national level.

Some studies which relate environmental issues to the perspective of the Qur'ān are relatively abundant; however, in general, these ideas remain largely conceptual and philosophical, as seen in the work of Seyyed Hossein Nasr and his concept of Islamic cosmology,(Nasr 1978, 1–11) Yusuf Qardhawi with the idea of environmental conservation through Islamic law (*syariah*),(al-Qardhawi 2001, 57). Ibrahim Abdul Matin articulates the principles of Islam in maintaining the environment, (Matin 2010, 3–5) Mujiyono Abdillah offers a discourse on environmental theology, (Abdillah 2001, 33–51) Mudhofir Abdullah explores the relationship between the Qur'ān and environmental conservation, (M. Abdullah 2010, 329–37) Abdul Fatah introduces the concept of environmental interpretation, (Fatah and Taufiq 2019, 205) and others. Previous research tended to be philosophical and theoretical, whereas this study combines both theory and practice with focusing study at UIN Raden Intan Lampung and UIN Walisongo, Semarang. This paper presents a new paradigm that integrates Qur'ānic principles with the green campus concept as an alternative framework to foster ecological awareness within the campus community.

This research methodology is qualitative and consists in interpreting the data found in field literature or analysing the obtained data (Cresswell 2014, 7). The locations for this research are UIN Raden Intan Lampung and UIN Walisongo Semarang. These two campuses were selected because they are recognized as the best in managing green campuses in Islamic State Higher Education Institutions, as reported by the UI GreenMetric World University Ranking. The results of the observations and interviews regarding the implementation of green campuses at both campuses would be correlated with the indicators from UI GreenMetric and the Qur'ānic vision of ecology. The collected data would be processed and coded, then interpreted in accordance with the established research questions (Cresswell 2014, 276–284).

1. The Green Campus Paradigm

The concept of green practice has gained global attention, highlighted by the United Nations Conference on Environment and Development's call for sustainable living. Educational institutions play a key role, making the green campus concept essential for integrating environmental values into campus management (Anthony Jnr 2021, 2). Wimala et al. describe a green campus as a concept implemented in higher education institutions based on ecological paradigms (Wimala, Zirads, and Evelina 2019, 1). Rahaju et al. define a green campus as a concept aimed at creating an environmentally friendly and sustainable environment within a higher education institution (Rahaju et al. 2022, 2). Safarkhani et al. define a green campus as a place where environmental, economic, social, and cultural aspects must be considered in all activities to achieve a sustainable ecological perspective (Safarkhani, Melody, and Örnek 2022, 320). In simple terms, a green campus is the efforts of higher education institutions to implement management practices based on sustainability principles.

The objective of the green campus paradigm is fundamentally to raise awareness regarding the significance of environmental values, which can be collectively implemented by the campus community. Building this awareness and transforming mindsets to foster sensitivity toward environmental issues is a challenging endeavour, necessitating comprehensive efforts and the involvement of all stakeholders. One of the most tangible initiatives starts from educational institutions because this is where knowledge is acquired, discussed, tested, and practiced. In this context, the concept of a green campus finds its urgency. Research proves that

green campus initiatives positively correlate with perceived quality of life among campus communities like a case study in University Sultan Zainal Abidin, Malaysia.(S. N.F. Abdullah et al. 2024, 252) Green campus is seen as having the potential to contribute significantly to the development of a sustainable society (Anthony Jnr 2021, 2). Even campuses that implement the green campus concept demonstrate a distinct quality of life compared to those that do not. This further emphasizes the critical role of green campuses in fostering ecological awareness to support sustainable living (Tiyarattanachai and Hollmann 2016, 6–14).

Many universities in Indonesia have made significant efforts to design campuses with the green campus paradigm. Among them is Universitas Gadjah Mada, which has developed an integrated campus waste management system, ensuring the campus remains clean and capable of effectively processing waste (Setyowati, Kusumawanto, and Prasetya 2018, 3–5). Universitas Pendidikan Indonesia has developed a Techno Park as part of its efforts to manage energy, waste, water, and transportation, all aimed at supporting and enhancing the quality of its green campus initiative (Devitama, Paramita, and Ardiani 2020, 1–2)UPI is ranked 44th in Indonesia, or equivalent to 100 in Asia (1000 in the world. Universitas Negeri Semarang, with its tagline "conservation campus," has also made significant efforts to become one of the leading green campuses in Indonesia (Prihanto et al. 2022, 1–2). Universitas Surabaya is also striving to implement environmental paradigms and actively participate in promoting sustainable living (Rahaju et al. 2022, 5). UIN Raden Intan Lampung is actively managing its campus with the green campus paradigm (Nasor and Jasmadi 2020, 233–235). UIN Walisongo is working to enhance environmental literacy among its students to support the implementation of the green campus initiative (Rofi'ah and Chusna 2022, 238–242).

In the context of developing a green campus, Biffeng Zhu et al. identify there are four key characteristics of the green campus development model: scientific research, environmental concern, collective participation, and synergy with societal development (Zhu, Zhu, and Dewancker 2020). While UI GreenMetric has defined six indicators to assess the implementation of environmental values in higher education institutions. They are: setting and infrastructure, energy and climate change, waste management, water management, transportation, and education and research (*Criteria & Indicators – UI Green Metric* n.d.). In this study, the parameters or indicators used to evaluate green campus practices are based on the formulation of the UI GreenMetric. Concerning with the implementation of indicators, Tiyarattanachai and Hollman suggest that meeting the UI GreenMetric criteria, such as energy conservation and reducing private vehicle use, requires careful planning to avoid compromising stakeholder well-being. For example, air conditioning restrictions should be applied only if buildings support natural ventilation, and reduced private vehicle use must be accompanied by adequate public transportation on campus (Tiyarattanachai and Hollmann 2016, 14–17). What Tiyarattanachai and Hollman note seems to emphasize the implementation of any indicator must carefully consider other aspects as well.

2. The Qur'ānic Vision on Ecology

The verses in the Qur'ān that hold ecological significance, as identified through thematic and subject-based exploration, The classification of these verses and their interpretations are as follows:

2.1. Prohibition Causing Damage to the Earth

The Qur'ān clearly prohibits individuals from causing harm or destruction to the Earth (Q.S. al-Baqarah/2:11,12, 27, 60 dan 205 Q.S. al-Māidah/5:64, Q.S. al-Arāf/7:56 Q.S. Ashuarā'/26: 152). Quraish Shihab, a well-known interpreter from Indonesia interprets Q.S. al-Baqarah/2:11-12 by explaining that the damage on Earth refers to actions

that result in something that originally holds value, functions well, and is beneficial, losing part or all of its value. As a consequence, it becomes less functional or beneficial (Shihab 2000, 1:103–105). In the ecological context, actions that diminish the functionality of nature are considered forms of ecological destruction. For example, illegal logging in forests reduces the number of trees, which, in turn, limits the capacity of roots to absorb and retain water during rainfall, potentially leading to floods or landslides. Such activities are categorized as actions that cause damage (*fasād*) to the Earth's surface.

2.2. Planting and Caring for Vegetation

In Q.S. Hūd/11:61, it is explicitly stated that Allah SWT created humans with the purpose of being stewards of the Earth, not as its destroyers. In Fath al-Bayan, the term *ista'marakum* (which means "and made you [humans] its stewards" [settled you in it]) is interpreted as a divine command from Allah SWT for humans to prosper and cultivate the Earth. This includes building dwellings and planting trees, "He commanded you to develop it by building houses and planting trees" (al-Qanuji 1992, 11:205). The concept of prospering the earth by building houses is intended to provide humans with shelter from the scorching heat of the sun and the cold of the night, ensuring their comfort and security. Additionally, the command to prosper the earth by planting trees symbolizes Islam's serious attention to nature. Trees are one of the key pillars of the global ecosystem. They supply abundant oxygen for human life, absorb carbon dioxide produced by vehicles and industrial activities, thus reducing air pollution. Their roots store rainwater, which helps prevent landslides and serves as a reserve for groundwater.

2.3. The Principle of Energy Conservation

The Qur'ān explicitly prohibits extravagant or wasteful behaviour, and Allah SWT disapproves of such acts of excess. This is clearly stated in Q.S. al-A'rāf/7:31 and Q.S. al-Isrā'/17:26-27. Imam al-Thabari, in his exegesis explains Q.S. al-Arāf/7:31 that the concept of extravagance (excessiveness) in the verse refers to Allah SWT's disapproval of those who transgress boundaries. He interprets this to mean exceeding the limits of moderation and propriety, particularly in matters of consumption and behaviour (al-Tabari 2000, 395).

Meanwhile, Ibn Kathir quotes a Hadith that states: "Eat, give charity, and dress without excessiveness and arrogance" (al-Quraisyi 1999, 407). This means that in daily life, individuals are encouraged to enjoy the provisions of Allah, such as eating, drinking, and dressing, but within reasonable limits. One should not be excessive (*isrāf*) or arrogant; rather, one should embody balance and humility, in accordance with Islamic teachings that emphasize moderation in all aspects. In the context of ecology, this verse signifies that the Qur'ān prohibits wasteful energy consumption and encourages the use of various natural resources proportionally and wisely.

2.4. Principles of Environmental Cleanliness

The Qur'ān emphasizes the importance of cleanliness, both in personal conduct and in the environment as stated in Q.S. al-Baqarah/2:222 and Q.S. al-Mudathir /74:4. In various verses, cleanliness is associated with righteousness and is considered an integral part of worship. For example, in Q.S. al-Baqarah/2:222, Allah mentions that He loves those who purify themselves. This notion extends beyond individual hygiene to encompass the broader responsibility of caring for the environment. In Q.S. al-Mudathir/74:4 Allah said: "And your clothing purify."

Ibn Kathir interpreted the verse with two meanings, both literal and symbolic. Literally, it is understood as cleaning clothes by washing them with water, while the symbolic meaning refers to purifying oneself from sinful acts or anything forbidden by Allah SWT, thereby making the heart pure (al-Quraisyi 1999, 263). Washing clothes and maintaining cleanliness are integral to keeping

the surrounding environment healthy and habitable. Dirt on clothing can become a source of disease and pollute the environment, so keeping clothes clean contributes to creating a clean environment. Prophet Muhammad SAW also emphasized that cleanliness is part of faith, and only those who are clean will enter paradise. "Purity (cleanliness) is a part of faith" (HR. Saḥīh Muslim, 328). From an ecological perspective, the verse Q.S. al-Mudathir /74:4 emphasizes that maintaining cleanliness of clothing is not merely about physical cleanliness but also reflects an awareness of human responsibility towards the environment.

The Qur'ānic vision on ecology which is classified into four categories as explained above is very close to the findings of Muhammad et al. who concluded that Qur'anic ecological values emphasize prohibitions against causing harm, underscore the importance of maintaining balance and justice, and warn against excessiveness (Muhammad et al. 2024, 6–9).

3. Green Campus Management at UIN Raden Intan Lampung

UIN Raden Intan Lampung (RIL) has been recognized as the best green campus in Indonesia within the category of State Islamic Higher Education Institutions. Additionally, it ranks as the ninth-best campus nationally across all categories (*Overall Rankings 2023 – UI Green Metric* n.d.). This achievement is a source of pride, as UIN RIL has been recognized as one of the most sustainable campuses. According to Suci Wulan Pawhestri, head of the Sustainable and Environmentally Friendly Campus Development Team, the green campus initiative was spearheaded by Prof. Dr. H. Moh. Mukri, M.Ag, during his tenure as rector (2017–2022), aimed to establish UIN RIL as an excellent green campus institution.

> The green campus initiative at UIN RIL was launched in 2018, driven by leaders seeking unique qualities to secure international recognition. The concept of a green campus emerged as a key strength for UIN RIL. (Pawhestri 2024).

The idea of transforming UIN RIL into a green campus is implemented in line with its vision which emphasizes the environment: "The realization of UIN RIL as an international reference in the development of integrative-multidisciplinary Islamic knowledge with an environmental perspective by the year 2035" (Lampung n.d.). The implementation of the green campus at UIN RIL is described as follows:

a. Setting and Infrastructure (SI) UIN RIL has a strong commitment to sustainable campus environmental management. The university spans an area of 455,957 m^2 (45 hectares) with a total building area of 79,768.92 m^2, resulting in a green open space ratio of 82.50 percent. The area dedicated to vegetation and absorption zones covers 161,529.8 m^2, which includes various gardens surrounding the faculty buildings, the rectorate building, and other facilities (TPKBBL 2023, 4).
b. Energy and Climate Change (EC) Regarding energy and climate change, UIN RIL has undertaken various efforts to enhance energy efficiency and reduce greenhouse gas emissions within the campus. Some of the programs implemented include the following: 1. Use of Energy-Efficient Devices, 2. Green Building Elements, 3. Implementation of Smart Buildings, 4. Renewable Energy Ratio, 5. Greenhouse Gas Emission Reduction Programs (TPKBBL 2023, 4–7).
c. Waste (WS) To manage waste on the UIN RIL campus, various activities have been implemented, including the following: 1. 3R Program (Reduce, Reuse, Recycle), 2. Reduction of Paper and Plastic Use. Some of these initiatives include a paperless administration policy using barcodes, campaigns promoting the use of tumblers, and

an e-learning program (TPKBBL 2023, 7–8).

d. Water (WR) In its water management efforts, UIN RIL has implemented a water conservation program through the construction of water reservoir designed for water storage and fish maintenance. There are 11 water reservoirs on campus, covering a total area of 22,716 m^2. This facility not only meets the campus's daily water needs but also helps address water shortages during the dry season, preserves vegetation, and supports various conservation and ecological projects within the UIN RIL environment. Additionally, water used for ablution from the mosque is recycled to irrigate plants and supply the water reservoir used for fish farming (TPKBBL 2023, 8–9).
e. Transportation (TR) UIN RIL has undertaken various efforts to enhance vehicle efficiency within the campus environment, including shuttle services, pedestrian pathways, and parking space restrictions. Additionally, a Zero Emission Vehicle policy is enforced on campus by designating vehicle-free days every Friday from 6 AM to 11 AM (TPKBBL 2023, 9–10).
f. Education (ED) In the educational aspect, UIN RIL has developed courses related to sustainability and organized events that focus on sustainability themes. UIN RIL offers a variety of courses that encompass different disciplines, from science to management. Some of these courses include: A. Islam and Environment: Understanding the principles of Islamic environmental ethics, teachings of the Qur'ān, and the practices of the Prophet regarding nature, B. Environmental Education: Promoting awareness of environmental issues and sustainable practices, C. Integration of Mathematics, Islam, and Environment: Integrating mathematical concepts within the context of environmental issues and Islamic principles (TPKBBL 2023, 10–12).

4. Green Campus Management at UIN Walisongo, Semarang

UIN Walisongo, Semarang, earned the title of the best green campus in the State Islamic Higher Education Institutions category in Java and ranked 4th nationally in 2023, following UIN Raden Intan Lampung, UIN Sultan Thaha Jambi, and UIN Raden Fatah Palembang (*Overall Rankings 2023 – UI Green Metric* n.d.). The green campus

Figure 1. Use of Solar Panels in *Ma'had* (Islamic Boarding School) and Mosques at UIN RIL
Source: sustainability report UIN RIL 2022).

Figure 2. Water reservoir and the rectorate building, which is claimed as one of the green buildings at UIN RIL, the researchers take a photo with the Head of UIN RIL's Green Campus Team
Source: personal documentation.

concept at UIN Walisongo emerged from the leaders' vision to create a unique value that would gain international recognition. With its ample green spaces, the campus had significant potential for sustainable design. Following discussions and benchmarking visits to Universitas Diponegoro and UIN RIL, UIN Walisongo committed to becoming a "smart and green campus."

Rusmadi, one of the managers of the We Green (Walisongo Eco Green) stated: "To boost international rankings, addressing environmental issues is strategic. Universitas Diponegoro set an example, inspiring Walisongo to follow this initiative" (Rusmadi 2024).

UIN Walisongo's focus on environmental issues is part of a broader strategy to boost recognition and improve international rankings, enhancing the university's reputation. These efforts have proven successful, with UIN Walisongo recognized as one of the top green campuses in the UI GreenMetric rankings (Rusmadi 2024). The implementation of the Green Campus initiative at UIN Walisongo is illustrated as follows:

a. Setting and Infrastructure (SI) UIN Walisongo spans 30.4 hectares, with 25.1 hectares dedicated to green open spaces. New buildings are designed with environmental management principles. In addition, efforts have been made to optimize the edupark and eduforest facilities within each faculty, each with its unique characteristics, such as: 1. Edupark of the Faculty of Science and Technology: Laboratory for observing plant diversification. 2. Edupark of the Faculty of Tarbiyah and Teacher Training: Microteaching lab and open learning spaces. 3. Eduforest of the Faculty of Social and Political Sciences: Conservation of local plants from various regions (a miniature of traditional forests) (Taufiq 2021, 2–6).
b. Energy and Climate Change (EC) The efforts related to energy and climate change at UIN Walisongo involve the application of sustainable principles in energy production and consumption. The total carbon footprint at UIN Walisongo is 6,957.2 metric tons (Walisongo 2022, 5).
c. Waste (WS) Waste management and recycling activities are key factors in creating a sustainable environment. At UIN Walisongo, 80% of organic waste is processed into compost, while 70% of inorganic waste is also processed (Walisongo 2022, 6).
d. Water (WR) Water management involves efforts to reduce water usage and enhance conservation programs. In relation to water conservation, 112 bio pores and 25 infiltration wells have been installed within the UIN Walisongo campus (Walisongo 2022, 7).
e. Transportation (TR) Transportation has a significant impact on carbon emissions and pollution levels on campus. Transportation policies aimed at

Figure 3. The rectorate building of UIN Walisongo, is claimed to be one of the green buildings on campus
Source: WeGreen [walisongo eco-green campus] UIN Walisongo.

limiting the number of motor vehicles, promoting the use of campus buses, and encouraging cycling will foster a healthier environment. UIN Walisongo has provided shuttle buses for campus residents to facilitate transportation to and from campuses 1, 2, and 3, as well as a central parking area, along with facilities for bicycles and electric bikes for mobility within the campus area (Walisongo 2022, 8).

f. Education (ED) Regarding education, according to the WeGreen sustainability report, UIN Walisongo has 16 student organizations related to sustainability, with a total of 273 courses focused on sustainability and 137 published scientific articles on the subject (Walisongo 2022, 9).

Based on the descriptions of the green campus implementation at the two above universities and observation in the field, the following analysis summarizes the strengths and challenges of environmental management at two universities:

The strengths of UIN RIL's environmental management include: 1. A vision as an eco-conscious campus with strong leadership commitment; 2. Effective water management through 11 reservoirs, preventing shortages and flooding; 3. A mandatory course on Islam and the Environment, with environmental issues integrated into all courses; and 4. Recognition of the campus mosque as an eco-mosque. The challenges include: 1. Drinking water dispensers sourced from the campus water reservoirs and available at several points around the campus are not functioning optimally. 2. Its main challenge lies in sustaining its top position among Islamic universities in the green campus category and advancing its achievements nationally and internationally. The strengths of UIN Walisongo include: 1. the leadership commitment previous leader to an eco-friendly campus; 2. Eduparks and eduforests in each faculty, combining ecological and educational benefits; and 3. A campus shuttle system reducing motor vehicle use. Challenges include: 1. A lack of consensus of the academic community on the green campus initiative; 2. the geographical condition which includes hilly and uneven terrain limiting sustainable mobility options.

5. The Qur'ānic Green Campus

The Qur'ānic Green Campus represents an innovative approach that integrates Qur'ānic principles on environmental stewardship with sustainability principles, guided by the UI GreenMetric framework in campus environmental management. This integration aims to strengthen the moral and spiritual commitment of the campus community, particularly in Islamic higher education institutions toward environmental

Figure 4. Edupark in one of the faculties in UIN Walisongo
Source: personal documentation.

preservation on campus. The Qur'ānic Green Campus is a concept rooted in the environmental teachings of the Qur'ān, which calls for actions such as planting and nurturing vegetation, the wise use of energy and maintaining environmental cleanliness. Additionally, it advises against engaging in destructive behaviours that harm the environment.

The Qur'ānic Green Campus is integration of The Qur'ānic teaching on environment and the formulation UI Green Metric indicator about green campus. Each UI Green Metric indicator is linked to relevant Qur'ānic verses that emphasize similar values. This thematic alignment serves as a foundation for understanding the spiritual motivation behind environmental practices. The indicators are contextualized within Islamic values, reflecting a holistic approach where faith and environmental sustainability are interconnected. Example: Energy and Climate Change (EC) aligns with Qur'ānic verses on avoiding waste and practicing moderation (Q.S. al-A'rāf/7:31). Water Management is driven by the Qur'ānic injunction to avoid extravagance and conserve water (Q.S. al-Isrā'/17:26-27).

Based on research conducted at two campuses concerning green campus, researchers concluded that the Qur'ānic Green Campus concept is quite feasible for implementation at UIN RIL. This is evident in its curriculum design, which mandates that all students take the "Islam and the Environment" course. This course covers Qur'ānic principles on environmental preservation, while environmental topics are also integrated into all courses, ensuring that ecological issues receive comprehensive attention. This approach effectively raises environmental awareness across the campus community. As a result, UIN RIL has achieved significant success, recognized as the leading environmental campus among Islamic universities in Indonesia. While at UIN Walisongo, the course "Islam and the Environment" has not yet become a mandatory subject; instead, it is only required to incorporate environmental issues into every course. A curriculum design that mandates environmental courses significantly impacts building awareness among the campus community. This is also evidenced by the study of Rusli et al., which found that delivering environmental education materials influences environmental awareness (Rusli et al. 2023, 273).

The findings of this study underscore the success of integrating the Qur'ānic principles with environmental concepts to enhance ecological awareness. For example, research by Ali and Agushi highlights

Table. 1. The integration can be presented as a matrix below

UI Green Matric Indicators	Qur'ānic Teaching	Implementation Example
Setting and Infrastructure	Khalifah: Stewardship (Q.S. Hūd/11:61)	Green spaces, forested areas, water absorption zones
Energy and Climate Change	Moderation, avoiding waste (Q.S. al-A'rāf/7:31; Q.S. al-Isrā'/17:26-27)	Renewable energy, smart buildings
Waste Management	Purity and cleanliness (Q.S. al-Baqarah/2:222, Q.S. al-Mudathir/74:4, Sahih Muslim, 328)	Recycling, waste segregation
Water Management	Moderation of using water (Q.S. al-A'rāf/7:31; Q.S. al-Isrā'/17:26-27)	Saving water
Education and Research	Avoiding harm (Q.S. al-Baqarah/2:11)	Mandatory courses, environmental research initiatives

Source: Researchers' analysis, 2024.

how combining Islamic teachings with environmental principles effectively fosters environmental consciousness. In educational contexts, this integration can be achieved by embedding these values into the curriculum. while religious leaders can promote environmental stewardship through sermons that emphasize the Qur'ān's guidance on the importance of protecting the environment (Ali and Agushi 2024, 952–53). Similarly, promoting the practice of rainwater harvesting as a proactive measure against water scarcity, as undertaken in Malaysia, is inspired by the motivational principles of the Qur'ān. This approach demonstrates the potential of Islamic principles to inspire sustainable environmental practices (Azmi, Hanafiah, and Yusoff 2023, 353–358). Even in studies on other subjects, The Qur'ānic values have also been proven to integrate effectively into the spirit of entrepreneurship within the realm of education, fostering an entrepreneurial mindset among students (Fatah, Karim, and Masruri 2023, 395–98). These findings, along with prior research, further affirm that the integration of Qur'ānic principles with environmental concepts is highly effective as a means of promoting environmental sustainability.

In the context of the Qur'ānic Green Campus model, UIN RIL can serve as a best model of implementation. Adopting The Qur'ānic Green Campus approach to campus environmental management is one of the ways to enhance the commitment to environmental preservation within Islamic higher education institutions with the spirit of religiosity. The motivation and calls presented in the Qur'ān are expected to foster a spirit of environmental stewardship, aligning these actions with the pursuit of religious merit through adherence to divine commandments. Moreover, sustainability should be viewed not only as a series of technical actions but also as a moral and spiritual responsibility. This perspective reinforces the identity of the campus as an institution that values and applies Islamic principles in sustainability practices.

Conclusion

The Qur'ānic green campus is an integration between The Qur'ānic values about the environment and the formulation of UI Green Metric indicators This integration aims to strengthen the moral and spiritual commitment of the campus community, particularly in Islamic higher education institutions. The implementation of a green campus at UIN Raden Intan Lampung (RIL) and UIN Walisongo serves as an exemplary model for similar activities at other Islamic Higher Education Institutions. Both campuses stand among the leading green campuses in Indonesia, with proven and tested environmental practices. While the Qur'ānic Green Campus concept is highly feasible to implement at UIN RIL, the evidence is the mandatory course on Islam and the Environment for all students. This formulation has cultivated

a high level of environmental awareness within the campus community, and ultimately, UIN RIL has been recognized as the top green campus among Islamic Higher Education Institutions in Indonesia.

Based on the above study, the following recommendations can be made, 1) UIN RIL must ensure that all campus facilities, particularly those related to the green campus initiative, function optimally. For instance, some drinking water dispensers sourced from the campus water reservoirs are non-operational. Therefore, regularly monitoring green campus-related facilities is crucial to ensure their optimal performance. 2) UIN Walisongo has not yet introduced a mandatory environmental course for all students; instead, environmental topics are merely integrated into existing courses. Making an environmental course, such as "Islam and the Environment" (as implemented at UIN RIL), compulsory could be a key step in fostering communal environmental awareness among campus members. 3) Islamic higher education institutions that are interested in developing green campuses can learn from the best practices of UIN RIL and UIN Walisongo.

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