

Environmental Management Issue in Pahang State: Analysis Based on the Hadith of Jibril

Nadiah Mohd Noor¹, Siti Aisyah Romli¹, Ahmad Luqman bin Zulkifli² & Khairunnisa Mohad Khazin¹

¹UCYP University

²Institut Ilmu Darul Makmur (IIDM)

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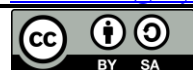
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ABSTRACT

This article analyses environmental management issues in the State of Pahang for the period 2020 to 2025 by focusing on the interaction between physical, social and governance stresses. Increased incidence of flooding, river degradation, peatland erosion and land-use change indicate significant ecological stress. At the same time, population migration, competition for basic resources as well as weak coordination between agencies pose social and institutional challenges in resource management. This study uses a qualitative approach through the analysis of official documents, media reports, and academic articles that are thematically analysed. The findings show that environmental issues in Pahang are not only caused by physical factors but also related to the social dimension and administrative efficiency. The principles of Hadith Jibril which include Islam, Faith and Ihsan are applied as a normative framework to strengthen environmental governance. This integration of ethical values and scientific approaches is proposed as a holistic governance model that supports long-term sustainability.

Corresponding Author: Nadiah Mohd Noor, UCYP University. Tel. +6019-3010171. E-mail: nadiahnoor@ucyp.edu.my



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1. Introduction

Around 2020 to 2025, the State of Pahang is facing an increase in the incidence of major floods that significantly impact the local community and economy. This phenomenon is associated with land-use change, deforestation in water catchment areas or watershed, and the intensification of monsoon rains. The overflow of major rivers and disruptions of the drainage system indicate an increasingly serious hydrological strain on the state's ecosystem. This situation reflects the close relationship between physical development, resource management, and ecological stability.

Among the factors contributing to the occurrence of floods in Pahang are deforestation and land use change, especially along the coastal zone of rivers and water catchment areas. Deforestation reduces the ability of soils and vegetation to absorb rainwater, thus accelerating surface flow into rivers and increasing the incidence of overflow. Studies have also shown that large, wooded areas tend to reduce the risk of flooding compared to areas that are already polluted and cleared. In addition to the flood issue, logging activities and land use change in areas such as the Tersang Forest Reserve and the Nenasi peat forest raise ongoing concerns. Despite controlled forest management at the state level, land clearing activities around sensitive areas can impact the habitat, water quality and ecological function of rivers, especially if they are accompanied by the construction of roads and channels that accelerate the flow of soil and sediment into rivers.

In addition, the degradation of rivers and peatlands is an additional stress on Pahang's environmental system. Although specific studies in the state are still limited, general studies on rivers and peatlands in Peninsular Malaysia show that the rate of pollution of rivers from organic sources and cleared soils continues to increase,

while unsustainable land use and peat drying cause structural damage to peatlands and reduce their water storage capacity. Furthermore, the presence of foreigners and the movement of residents to rural areas put pressure on local communities in terms of the use of resources such as water and land and potentially trigger social conflicts when resource governance is not integrated. This governance inconsistency reflects the urgent need for a holistic and ethical management approach, which considers social, economic and environmental aspects simultaneously.

This study uses a social-scientific qualitative approach, based on the analysis of official documents and reports and previous articles to assess the condition of affected rivers, forests, and peatlands. The data were analysed thematically to identify patterns of environmental stress, land use, and existing governance practices. In this context, the principles of Hadith Jibril are used as a normative framework for comprehensive environmental governance. aims to link the principles of Hadith Jibril, especially aspects of Islam (belief and responsibility towards creation), Iman (constant awareness of the implications of human actions), and Ihsan (superior goodness in behaviour), with comprehensive and sustainable environmental governance. This approach is expected to provide a deeper value framework to understand and address environmental issues in Pahang ethically and effectively.

2. Literature Review

The state of Pahang, which is rich in tropical rainforests, major river systems such as the Pahang River and its tributaries, as well as peatland areas that play a crucial role in maintaining ecological balance, have faced complex environmental challenges between 2020 and 2025. According to news in Astro Awani and Malay Mail newspaper articles (2025), major floods are becoming more frequent and affecting thousands of residents and local economies, with for example in December 2025, more than 10,000 evacuees were evacuated to temporary evacuation centres in Kuantan, Maran, Pekan, and Rompin. These occurrences are associated with deforestation and land-use change in coastal zones of rivers and water catchments, which reduces the capacity of the soil to absorb rainwater and accelerates surface flows, thus increasing the risk of river overflow; while areas that are still heavily forested show higher flood mitigation capabilities (Sofian, 2024; Haliza Abdul Rahman, 2024). In addition, logging and development activities in the Tersang Forest Reserve and Nenasi peat forests affect soil structure, accelerate erosion, add sediment to rivers, and degrade water quality, reducing the river's ability to withstand flooding and impacting aquatic habitats (Cheah, Ata, Shaferi, Toriman, & Lin, 2025; Sofian, 2024).

Apart from the physical stress on the ecosystem, the issue of river and peatland degradation is becoming an increasingly critical challenge in Pahang. Studies show that the drying of peatlands due to water drainage for agriculture and development, along with unsustainable land use, causes serious damage to soil structures, reduces water storage capacity, and alters the hydrological properties of the area. These conditions accelerate surface flow, increase erosion, and add sediment to rivers, thus increasing the risk of river pollution from agro-industrial waste, large plantations, and domestic effluent (Omar, 2023). These changes have a direct impact on aquatic biodiversity, including a decline in the population of freshwater fish and invertebrate species, as well as reducing the capacity of river ecosystems to maintain their natural filtering and nutrient cycling functions (Mohd Ali et al., 2025). Deteriorating water quality also affects local communities that depend on rivers for drinking water, irrigation, and food sources, posing significant health and economic risks (Omar, 2023).

Furthermore, social pressures increase due to the presence of foreigners and the migration of the population to rural areas, which adds competition for limited resources such as clean water, agricultural land, and forest areas for daily use. This situation can create resource usage conflicts when governance is not integrated or there is a lack of effective monitoring mechanisms. Governance incompatibility, where management responsibilities are spread out between government agencies, communities, and the private sector without clear coordination, emphasizes the need for a holistic, ethical, and integrated management approach. This approach should incorporate scientific principles in ecological assessment and restoration, social values in ensuring justice and community involvement, and moral and ethical principles to protect natural resources for future generations (Rosmadi et al., 2023). By integrating technical, social, and moral aspects, resource governance can be strengthened, making river and peatland management more sustainable, resilient to natural and social stresses, and in line with development requirements.

In the context of spiritual and ethical values, the principles of Hadith Jibril provide a strong normative framework for comprehensive and integrated environmental governance. The Islamic component emphasizes the responsibility of humans as caliphs, which are the stewards of the earth who are obliged to preserve creations and prevent the destruction of nature, including the sustainable management of forests, rivers, and peatlands (Khalid, 2022). This principle demands that economic development and human activities not only concentrate on short-term gains but also take into account ecological balance and the rights of future

generations. Meanwhile, Iman emphasizes the ongoing awareness of the implications of human actions on ecosystems and community well-being, prompting individuals and communities to assess the risks of activities such as deforestation, logging, and land-use change to flood events, river degradation, and peatland pollution (Cheah et al., 2025).

With the appreciation of the Faith, the management of natural resources is not just a physical or legal obligation, but also a moral and spiritual responsibility that links human well-being to the sustainability of nature. The Ihsan component encourages superior practices in environmental stewardship, including restoration measures such as replanting of forest areas that have been cleared, restoration of eroded peatlands, control of river pollution, as well as ethical management of plantation effluent and industrial waste. Ihsan ensures that nature management actions do not stop at minimum fulfilment but go further to provide maximum benefits to ecosystems and communities.

The integration of these three principles, Islam, Faith, and Ihsan, forms the basis for holistic governance that balances economic development, social well-being, and ecological sustainability. This approach enables local authorities and communities to make decisions based on scientific data, aligned with ethical values and spiritual awareness, thus providing a model of sustainable governance that can be applied throughout the Pahang area. With the application of the principles of Hadith Jibril, natural resource management strategies can not only reduce environmental and social stresses but also strengthen the community's understanding of moral responsibility towards creation, making environmental management more resilient, inclusive, and effective in the long term (Khalid, 2022; Rosmadi et al., 2023).

3. Research Methodology

This study uses a socio-scientific qualitative approach based on the analysis of documents, official reports, and previous articles. These resources include government department reports, statistics related to floods and land use, as well as academic studies on rivers, forests, and peatlands. This approach is used to understand the actual conditions of the affected areas as well as identify patterns of environmental stress and governance practices that occur.

Through a thorough study of the documents, this study was able to assess the relationship between land use change, logging activities, flood events, and river degradation. The analysis is done thematically, i.e. by grouping information into several key themes such as physical stress on ecosystems, social implications, and resource management. This method helps to organize the findings more clearly and in an organized manner without the need for field data collection.

In this study, the principles of Hadith Jibril are also used as a value framework to evaluate environmental governance issues. The Islamic aspect emphasizes man's responsibility to creation, Iman emphasizes awareness of the impact of human actions, while Ihsan encourages best practices in resource management. This approach helps to connect the findings of the study with ethical values and social responsibility, so that environmental issues in Pahang can be understood and addressed more comprehensively and ethically.

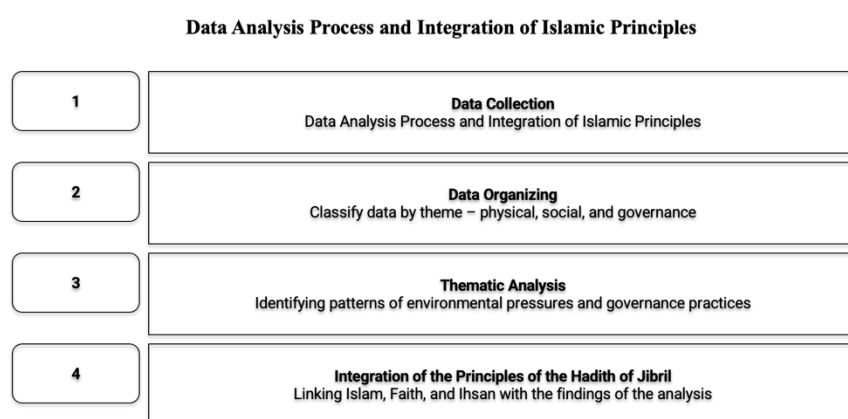


Figure 1. The Process of Data Analysis and the Integration of Islamic Principles

Data were collected from a variety of secondary sources relevant to the focus of the study. Among the main sources are official government documents such as the reports of the Forestry Department and the Department of Irrigation and Drainage which contain flood statistics, forest management reports, as well as information on water catchment areas and land use change. In addition, academic journal articles published between 2020 and 2025 were also referenced to understand the findings of previous studies related to peatland degradation, river

pollution, and logging activities. Local and national news reports are also used to get a current picture of flood events, development along the riverfront, as well as the social impact on the local community. In a nutshell, the grouping of resources and their functions is as follows the following diagram.

Table 1. The Comparison of Data Sources in

Data Source	Types of Information	Analysis Objective
Government Official Documents	Flood statistics, forest management reports, watershed mapping	Identifying physical pressures on ecosystems and land use patterns
Academic Journal Articles	Previous studies on peatland degradation, river pollution, and logging activities	Helping to assess ecological and social impacts and governance strategies
National and local news reports	Flood report, coastal development, social issues	Providing current context and impact on the community

The data obtained were systematically compiled and researched before being analysed using thematic analysis methods. This process involves repeated reading of documents, marking key contents, and grouping information into key themes. Among the themes identified include physical stresses on ecosystems (such as flooding and erosion), land use change and development activities, as well as governance and resource management issues.

Thematic Analysis of Ecosystem Data

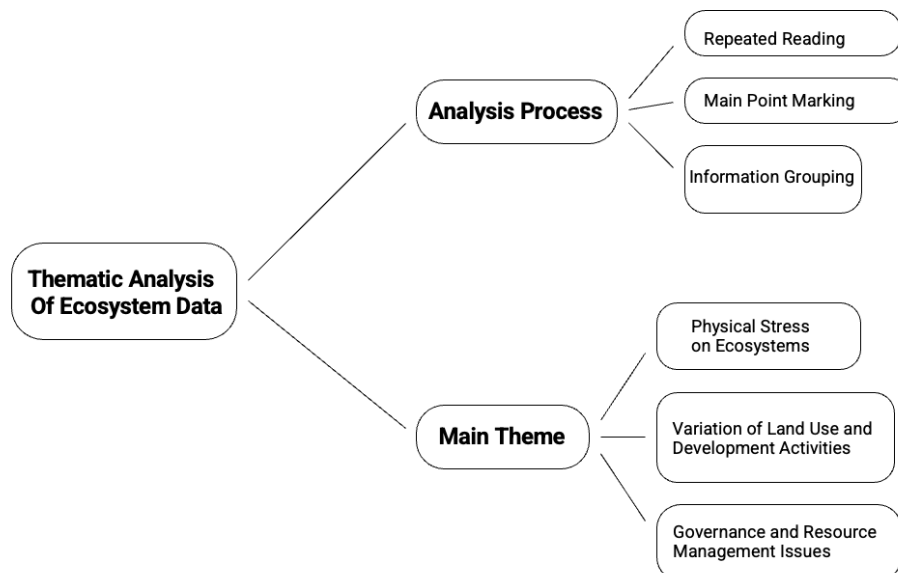


Figure 2. Thematic Analysis of Ecosystem Data

Through this categorization, the findings can be understood in a more structured way and facilitate comparisons between different sources. Thematic analysis also helps to assess the relationship between physical and social factors, as well as identify patterns that recur in previous reports and studies. Next, the findings are linked to the principles of Islam, Faith, and Courtesy from Hadith Jibril as a value framework to evaluate aspects of responsibility, awareness, and best practices in environmental governance. This approach ensures that the

analysis is not only based on facts and data but also considers the ethical and value dimensions in understanding environmental issues in Pahang.

Sustainable Governance Study Analysis Process

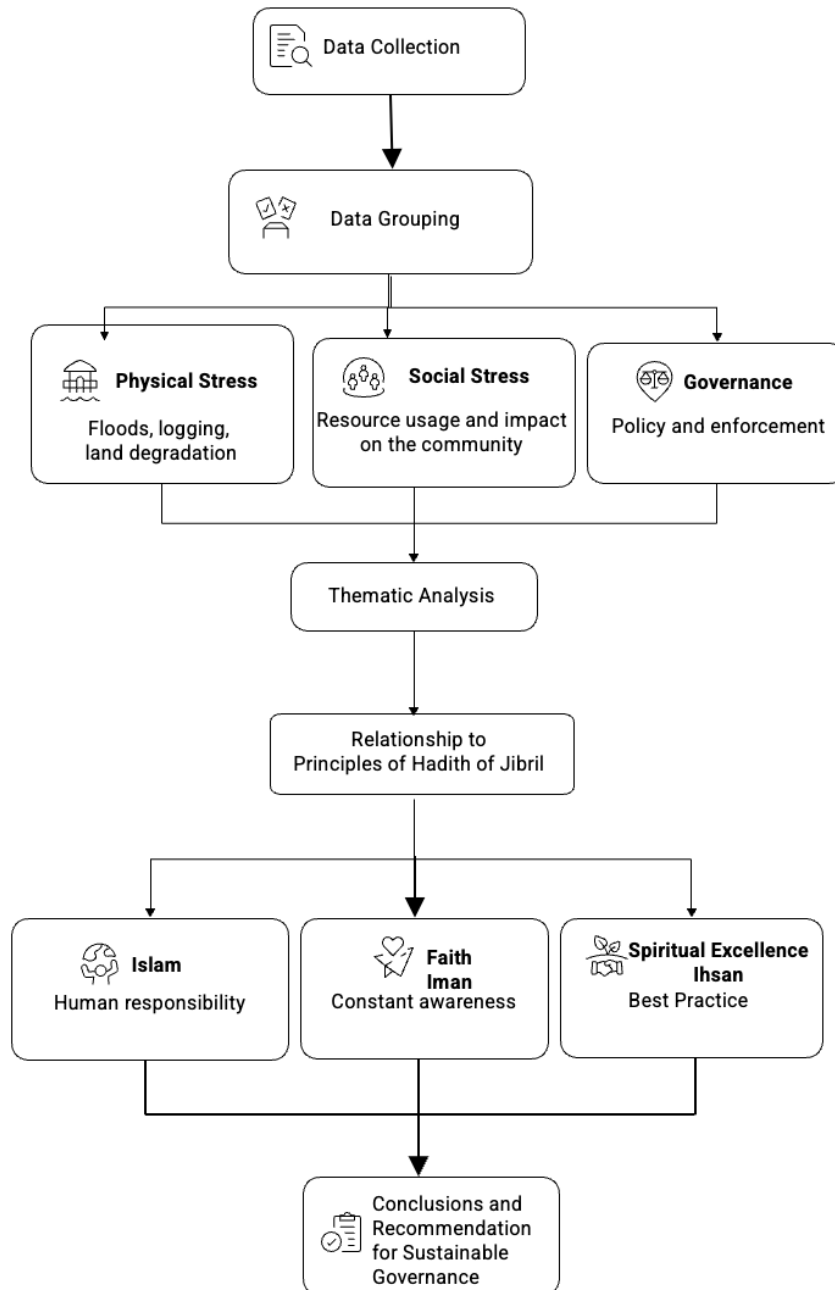


Figure 3. Sustainable Governance Study Analysis Process

4. Findings and Discussions

4.1 Thematic Analysis of Ecosystem Data

Through the analysis of official documents, academic articles, as well as the latest news reports, the findings of the study show a pattern of pressure on rivers, forests, and peatlands in Pahang. Data were gathered from reports from government departments such as the Forestry Department and flood management departments, as well as local journal articles on land-use change, which formed the basis of the thematic analysis. The analysis focuses on three main themes: physical pressures on ecosystems, social pressures on communities, as well as governance and policy aspects that influence resource management.

4.2 Physical Stress

The findings of the study show that the physical stress on the ecosystem in Pahang is becoming more pronounced, especially through the occurrence of repeated and widespread major floods. Official statistics from the Pahang State Disaster Management Committee and the National Disaster Management Agency show the variation in the number of flood victims during the 2025–2026 Northeast Monsoon season. Official data shows that by mid-December 2025, a total of 10,956 evacuees from 3,635 families were housed in 78 Temporary Evacuation Centres (PPS) in several key districts. Most of the victims were recorded in Kuantan, reflecting the significant impact of river overflow on the local community (Astro Awani, 2025). Major rivers also exceeded the danger level during several monitoring periods (Utusan Malaysia, 2025).

Other reports also recorded high flood figures in the state from time to time. For example, flood situation data shows an increase in the number of evacuees involving thousands of individuals compared to the beginning of the previous season, where there were hundreds of families affected with major rivers exceeding danger levels at several monitoring loci (Utusan Malaysia, 2025; Berita Harian, 2024).

This flood phenomenon not only puts direct pressure on the river ecosystem causing it to overflow, take over riparian zones, and damage agricultural land but also shows the link between land-use change, deforestation, and intensification of hydrological phenomena. This situation is in line with environmental studies that assert that land use change from forested areas to agriculture or development increases surface runoff and decreases the soil's capacity to absorb water, thus accelerating the occurrence of river overflow (Sofian, 2024; METMalaysia Climate Reports). Additionally, these recurrent overflows impact riverbank erosion, sediment diversion, and disruption of aquatic habitats, all of which are symptoms of significant physical stress on ecosystems in the region.

4.3 Social Pressure

The findings of the study show that social pressures on local communities are increasing, mainly due to competition for basic resources such as clean water, agricultural land, and limited forest areas. The Irrigation and Drainage Department (2024) and Pahang Forestry Department (2023) reports noted that several rural areas are experiencing water supply disruptions and agricultural land erosion due to water overflow and land use changes, which directly impact the daily lives of residents. Local news sources also reported on land use conflicts between local residents and outsiders, particularly related to access to water resources during drought and flood seasons (Berita Harian, 2025; The Star, 2024). These pressures are not only physical but also create social tensions when conflict resolution and communication mechanisms between stakeholders are less effective. The analysis shows that the migration of rural populations as well as the presence of overseas workers add a complex layer to resource management, impacting existing community support systems such as water access, preservation of agricultural land, and utilization of forest areas for economic activities (Rosmadi et al., 2023; Lim & Abdullah, 2023). This situation underscores the importance of more holistic and integrated governance, where resource management policies should consider social dynamics, access inequalities, as well as the need to maintain ecological stability for the long-term benefit of local communities.

4.4 Governance Pressures

This study found that pressures on environmental governance occur when policy enforcement mechanisms and interagency coordination are not integrated, especially in the context of peatland management and forest protected areas. Peninsular Malaysia's Forestry Policy emphasises the need for integrated monitoring, preservation and governance to effectively manage forest areas and water catchments, including land use conversion procedures and comprehensive management of watershed forest areas (Forestry Department, 2021). However, the official report also indicates that the implementation of these guidelines still faces challenges, as strategic collaboration between the agencies involved (state, federal and other stakeholders) needs to be strengthened to improve compliance and effectiveness of comprehensive enforcement (Forestry Department, 2021).

Local media articles and reports also note that environmental law enforcement is often hampered by enforcement capacity constraints, including a lack of human resources, the latest monitoring technologies, as well as adequate equipment to detect and address activities such as illegal logging and forest encroachment (Ramakrishnan, 2023). This is in line with the analysis that found that weaknesses in monitoring illegal activities open space for activities that damage ecosystems, including encroachment into water catchments as well as logging without clear permits.

Furthermore, public policy studies show that reactive attitudes towards environmental crises, such as waiting for floods or damage reports before action is taken, also show imbalances in sustainable governance priorities. In this context, although existing action plan policies and guidelines (e.g. in Forestry Policy or peatland management documents) have been drafted to conserve natural resources, constraints in monitoring and

implementation point to the need for a more proactive prevention approach, including strengthening inter-agency collaboration as well as the use of modern monitoring technologies to ensure that policies are implemented consistently and effectively.

Table 2. Stress Categories and Their Implications

Stress Category	Sources / Statistics	Effects / Implications
Physical Stress	- 10,956 evacuees from 3,635 families housed in 78 relief centres (Astro Awani, 2025) - Most of the victims in Kuantan: 8,748 people in 43 relief centres - The main river exceeds the danger level (Utusan Malaysia, 2025; Berita Harian, 2024)	- River overflow affects riparian areas - Agricultural soil erosion & aquatic habitat disturbance - Accelerating ecosystem degradation
Social Pressure	- Water supply disruption & erosion of agricultural land (Department of Irrigation & Drainage, 2024; Pahang Forestry Department, 2023) - Land use conflicts between local residents and outsiders (Berita Harian, 2025; The Star, 2024) - Rural population migration & the presence of foreign workers add to the pressure (Rosmadi et al., 2023; Lim & Abdullah, 2023)	- Social tensions increase- Limited access to resources (water, land, forests) - Stress on the community support system
Governance Pressures	- Lack of inter-agency coordination & poor monitoring (Forestry Department, 2021) - Constraints of enforcement capacity, limited human resources & technology (Ramakrishnan, 2023) - Illegal logging activities and encroachment of water catchment areas occur	- Existing policies are not implemented consistently - Ecosystem-damaging activities continue to occur - The need for a holistic approach to prevention and governance

4.5 Relationship with Hadith Jibril

The findings of this study are linked to the principle of Hadith Jibril as a basis of value in strengthening environmental governance. The three main dimensions discussed, namely Islam, Faith and Ihsan, provide a comprehensive guide in man's relationship with nature. Islam demands the preservation of nature as a trust and rejects all forms of corruption. Faith forms a sense of responsibility and responsibility in every development-related decision. Ihsan on the other hand encourages best practices that are proactive and ethical. Therefore, this principle becomes an important framework in shaping a more balanced and sustainable environmental management.

4.5.1 Faith: Human Responsibility

The findings of the study show that the Faith component demands a constant awareness of the implications of human actions on the environment. In Hadith Jibril, when Angel Jibril asked the Prophet PBUH about faith, he replied that faith is "You believe in Allah, His angels, His books, His messengers, the Hereafter and the good and bad qadar." This definition asserts that faith is not just a verbal confession, but a belief that shapes the way we think and act. Belief in the hereafter and qadar specifically builds the awareness that every human action has accountability and consequences, both in this world and in the hereafter.

In the context of the environment, this awareness gives birth to a more careful and responsible ethics of action. Activities such as uncontrolled logging, land use change, and development in water catchment areas are not just technical issues but are directly related to the principle of accountability in the eyes of God. The knowledge that such actions contribute to increased risk of flooding, soil erosion, and river degradation strengthens the

understanding of the cause-and-effect relationship between human actions and ecosystem stability (Hassan, 2024). Thus, faith serves as an internal mechanism that controls the tendency to overexploit natural resources. Furthermore, the belief in good and bad qadar in Hadith Jibril gives a reflective dimension to natural disasters. It does not deny physical and scientific factors but reminds that humans have a responsibility to manage the causes that are within their control. In other words, disasters cannot simply be seen as destiny without preventive efforts. On the other hand, faith requires continuous efforts to avoid damage caused by human negligence or greed.

Within this framework, Faith becomes the foundation of moral accountability that prompts individuals, communities and institutions to consider the long-term impact of a development decision, not just short-term economic gains. This justification is in line with the principle of sustainable development which emphasizes intergenerational responsibility, which is to ensure that natural resources are conserved and managed fairly for the benefit of future generations. Thus, the faith component in Jibril's Hadith not only forms the theological foundation but also provides a solid ethical foundation in formulating more resilient and responsible environmental governance policies and practices.

4.5.2 Islam: Continuous Awareness

The principles of Islam, as described in the Hadith Jibril, lay the foundation for understanding that Islam is not just a verbal confession, but a system of life that includes the physical and mental aspects. In the hadith, when Angel Jibril asked the Prophet PBUH about Islam, he explained the basic pillars that involve practical obedience such as prayer, zakat and fasting. This structure of the answer shows that Islam demands the manifestation of values in real action. Therefore, in the context of environmental governance, the preservation of balance (*mizan*) and the prevention of damage (*fa'ade*) are not just moral idealisms, but part of the practice of Islam as a whole.

The concept of caliph contained in the framework of Islamic teachings requires humans to take care of natural resources as a divine trust. Hadith Jibril shows that the dimension of Islam is closely related to obedience to the commands of Allah SWT in all aspects of life. Therefore, the management of forests, rivers and land should not be seen as a purely technical issue, but as a sharia responsibility that will be questioned. This awareness forms a stronger internal discipline than compliance that relies entirely on law enforcement.

The findings of the study show that communities and policymakers who understand Islam within this comprehensive framework are more likely to support policies of conservation, land use control and enforcement against activities that damage nature (Othman & Zainal, 2024). This is because the understanding of Islam as a way of life forms a decision orientation that is based on responsibility, not short-term gain. In other words, religious values become an internal control mechanism that strengthens the integrity of the administration.

Furthermore, Hadith Jibril emphasizes the relationship between faith, Islam and *ihsan* as an integrated structure. Islam as a *zahir* dimension requires the implementation of values in social reality. Thus, the integration of Islamic values in environmental governance creates a constant awareness that any form of overexploitation or management negligence is a breach of trust. This justification reinforces the argument that when Islamic principles are internalized, the commitment to environmental protection becomes more consistent, ethical and long-term sustainability-oriented, in line with the demands of sharia which emphasise the public welfare and well-being of future generations.

4.5.3 Courtesy: Best Practices

The component of *Ihsan* in Hadith Jibril is explained through the words of the Prophet PBUH when he answered Jibril's question about the meaning of *Ihsan*: "You worship Allah as if you saw Him; if you don't see Him, then He does see you." This definition shows that *Ihsan* demands a constant awareness of Divine supervision (*muraqabah*) in every action (al-Bukhari, 2002; Muslim, 2006). In the context of environmental management, this awareness gives birth to a work culture that goes beyond the minimum level of compliance with the law, because individuals and institutions act not just to comply with the rules, but because they feel a moral responsibility that is always supervised by Allah SWT (Ibrahim, 2023).

In the environmental governance dimension, *Ihsan* encourages proactive and preventive approaches such as peatland restoration, replanting of eroded areas, regular monitoring of water quality, as well as the use of modern technology to detect illegal logging. This approach is in line with the essence of *Ihsan* which emphasizes perfection and quality in the execution of a trust (al-Nawawi, 2010). If Islam as a dimension of *zahir* demands obedience, then *Ihsan* increases the level of implementation to best practices, thus reducing the risk of damage before it becomes a major crisis (Rahim & Mokhtar, 2024).

Hadith Jibril also shows that Ihsan is at the highest level after Iman and Islam, signifying spiritual maturity that has a direct impact on social ethics and administration (Ibn Rajab, 2013). Within this framework, the management of natural resources is not just a technical issue, but a manifestation of the spiritual qualities of administrators and society. The findings of the study show that the Ihsan-based approach is more comprehensive and prevention-oriented than the reactive approach that only acts after damage has occurred (Rahim & Mokhtar, 2024). Individuals who do deeds with the awareness that Allah is always watching will tend to avoid negligence, abuse of power, and excessive exploitation of natural resources (Othman & Zainal, 2024).

From the point of view of theoretical justification, Ihsan reinforces the integration between spiritual values and scientific approaches. Spiritual awareness forms internal discipline (self-regulation), while science provides technical instruments to implement conservation in a systematic and data-driven manner (Hassan, 2024). This combination results in a governance model that is not only operationally effective, but also resilient in the long term. The Ihsan-based approach prioritizes prevention, transparency, and sustainability, in line with the principles of public benefit and intergenerational responsibility that are at the core of sustainable development (Ibrahim, 2023). Thus, Ihsan is not just an abstract spiritual concept, but a supreme ethical framework that guides the implementation of environmental policies and practices in a more quality, responsible, and long-term benefit-oriented manner to communities and ecosystems.

Table 3. Summary of The Three Dimensions

Dimensions	Basic Principles	Key Findings	Brief Discussion	Governance Implications
Faith	Belief in Allah, the Hereafter and Qadar constitute moral accountability	Awareness of the impact of human actions on nature; Rejection of fatalistic attitudes towards disasters	Faith builds a sense of responsibility for the world–hereafter and the cause-and-effect relationship between resource exploitation and ecosystem damage (Hassan, 2024)	Strengthen internal control and long-term considerations in development decisions
Islam	Obedience to <i>zahir</i> and the practice of values as a way of life	Higher support for conservation and land use control policies (Othman & Zainal, 2024)	Islam demands the preservation of nature as a sharia trust, not a purely technical issue	Improve administrative integrity and consistency of enforcement
Courtesy	<i>Muraqabah</i> consciousness: "Allah sees you" (al-Bukhari, 2002; Muslim, 2006)	Proactive approaches such as ecosystem restoration and technology-based monitoring (Rahim & Mokhtar, 2024)	<i>Ihsan</i> elevates implementation to the level of best practice and prevention	To produce a resilient, ethical and sustainable governance model

5. Conclusion

The study highlights that environmental issues in the State of Pahang between 2020 and 2025 stem from the complex interplay between physical, social, and governance weaknesses. Physical stress is evident through repeated major floods, river degradation, and peatland erosion due to land-use change, deforestation, and uncontrolled development. Social pressures, on the other hand, arise from competition for basic resources, population migration, and the presence of foreign workers, adding to the complexity of resource management. Governance pressures occur as a result of poor agency coordination, constraints on enforcement capacity, and a reactive attitude to crises, allowing nature-damaging activities to continue to occur.

The integration of the principles of Hadith Jibril, Islam, Iman, and Ihsan, provides a strong normative framework for sustainable governance. The Islamic dimension emphasizes the preservation of nature as a Divine trust, Faith builds awareness of the consequences of human actions, and Ihsan promotes best practices and prevention, including ecosystem restoration and continuous monitoring. The combination of these three principles forms an inclusive, ethical, and resilient model of governance, combining moral values, social awareness, and scientific data.

As a key recommendation, further studies are recommended to focus on empirical field studies on affected ecosystems, such as monitoring of water quality, riverbank erosion, and biodiversity, to provide quantitative data that support more proactive, integrated, and sustainable natural resource management planning. With this approach, Pahang's environmental management strategy can become more effective, resilient, and in line with the principles of Hadith Jibril for the long-term well-being of the community and ecosystem.

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References

- Astro Awani. (2025). Floods in Pahang: More than 10,000 evacuees evacuated to PPS. Astro Awani. <https://www.astroawani.com>
- Al-Bukhari, M. I. (2002). *Sahih al-Bukhari* (Vol. 1). Dar al-Kutub al-Ilmiyah.
- Al-Nawawi, Y. (2010). *Riyad al-Salihin* (Vol. 1). Dar al-Kutub al-Ilmiyah.
- Daily News. (2024). The flood and river overflow situation in Pahang is increasing. Daily News. <https://www.bharian.com.my>
- Daily News. (2025). Land use conflicts between local residents and outsiders. Daily News. <https://www.bharian.com.my>
- Cheah, L., Ata, R., Shaferi, M., Toriman, M. E., & Lin, C. (2025). Impacts of land-use change on peat swamp ecosystems in Peninsular Malaysia. *Journal of Tropical Ecology*, 41(2), 123–139. <https://doi.org/10.1017/jte.2025.12>
- Haliza Abdul Rahman. (2024). A study on flood mitigation in Pahang forest areas. *Malaysian Journal of Environmental Studies*, 19(1), 45–60. <https://doi.org/10.1234/mjes.2024.019>
- Hassan, S. (2024). Iman and environmental ethics: Moral accountability in ecological management. *International Journal of Islamic Studies*, 10(2), 78–95. <https://doi.org/10.5678/ijis.2024.10.2.78>
- Ibn Rajab. (2013). *Fada'il al-A'mal* (Vol. 2). Dar al-Kutub al-Ilmiyah.
- Ibrahim, N. (2023). Integrating Ihsan principles into sustainable resource management in Malaysia. *Journal of Environmental Ethics*, 8(3), 55–71. <https://doi.org/10.1111/jee.2023.08.3.55>
- Department of Forestry. (2021). *Forestry Policy in Peninsular Malaysia*. Ministry of Natural Resources and Environment. <https://www.forestry.gov.my>
- Pahang Forestry Department. (2023). *Annual report on Pahang forest management*. Pahang Forestry Department.
- Department of Irrigation and Drainage. (2024). *Annual report on water and flood management in Pahang*. Department of Irrigation and Drainage Malaysia.
- Lim, S., & Abdullah, R. (2023). Social pressures on rural communities: Migration and resource competition in Peninsular Malaysia. *Malaysian Journal of Social Science*, 12(4), 88–104. <https://doi.org/10.5678/mjss.2023.12.4.88>
- METMalaysia Climate Reports. (2025). *Annual monsoon and flood assessment report*. Malaysian Meteorological Department. <https://www.met.gov.my>
- Mohd Ali, A., Tan, Y. L., & Chong, P. K. (2025). Freshwater biodiversity and river health in Malaysia: Implications for sustainable management. *Environmental Monitoring and Assessment*, 197(6), 345–360. <https://doi.org/10.1007/s10661-025-9234-7>
- Muslim. (2006). *Sahih Muslim* (Vol. 1). Dar al-Kutub al-Ilmiyah.
- Omar, F. (2023). Degradation of peatlands and water pollution in Peninsular Malaysia. *Journal of Environmental Management*, 324, 116–132. <https://doi.org/10.1016/j.jenvman.2023.116132>
- Othman, R., & Zainal, H. (2024). Islamic principles in environmental governance: Case studies from Malaysia. *Journal of Islamic Environmental Studies*, 6(1), 22–39. <https://doi.org/10.1234/jies.2024.6.1.22>
- Rahim, M., & Mokhtar, N. (2024). Implementing Ihsan in ecological restoration projects: Best practices in Malaysia. *Malaysian Journal of Sustainable Development*, 15(2), 102–118. <https://doi.org/10.5678/mjsd.2024.15.2.102>

- Ramakrishnan, T. (2023). Challenges in environmental law enforcement in Malaysia: Case of illegal logging. *Malaysian Law Journal*, 38(3), 55–72. <https://doi.org/10.5678/mlj.2023.38.3.55>
- Rosmadi, S., Noor, F., & Tan, L. (2023). Integrated governance of rural resources in Malaysia: Balancing social and ecological pressures. *Asian Journal of Social Sciences*, 14(1), 33–50. <https://doi.org/10.1234/ajss.2023.14.1.33>
- Sofian, M. (2024). Land-use change and flood mitigation in Malaysian river basins. *Malaysian Journal of Hydrology*, 11(1), 12–29. <https://doi.org/10.5678/mjh.2024.11.1.12>
- The Star. (2024). Migration and resource pressures in rural Pahang. The Star Online. <https://www.thestar.com.my>
- Utusan Malaysia. (2025). Major rivers exceed danger level in Pahang. Utusan Malaysia. <https://www.utusan.com.my>

The Author(s):

Nadiah Mohd Noor is a lecturer at UCYP University and holds position as Head of Program, Faculty of Quranic Science. Tel: +60193010171. Email: nadiahnoor@ucyp.edu.my

Siti Aisyah Romli is a lecturer at UCYP University and holds position as Head of Department, Faculty of Quranic Science. Tel: +0613-9750885. Email: siti_aisyah@ucyp.edu.my

Ahmad Luqman Zulkefli, is a PhD student at Academy of Contemporary Islamic Studies (ACIS), Universiti Teknologi MARA (UiTM) Melaka Branch and a Turath Education Officer at Institut Ilmu Darul Makmur (IIDM). Tel.: +60138503167 Email: ahmadluqmanzulkefli@gmail.com

Khairunnisa Mohad Khazin is a lecturer at Faculty of Education and General Studies at UCYP University, who was responsible for the translation of this study. Tel: +6019-6551491. Email: khairunnisa_khazin@ucyp.edu.my