

Article History

Received : 10 October 2025
Revised : 2 December 2025
Accepted : 9 December 2025
Published : 10 December 2025

SHARIA GREEN ECONOMY IN RESPONSE TO FLOOD DISASTERS IN SUMATRA: AN ANALYSIS OF MAQASHID AL-SHARIA AND FIQH BI'AH

Fathiya Nursaldi az-Zahrah¹, Dita Indah Sari Hazuwar², Amirul Hakim³

Universitas Islam Negeri Imam Bonjol Padang, Indonesia¹

Universitas Jambi, Indonesia²

As-Sofa Islamic College, Selangor Malaysia³

fathiyanursaldi@gmail.com¹, ditahazuwar@gmail.com², akimnadzri@gmail.com³

ABSTRACT

This paper examines the role of Maqashid al-Sharia as an ethical and moral framework for developing green economic policies to enhance community and ecosystem resilience to flood disasters in Sumatra. Through literature review and conceptual analysis, this study integrates the principles of Maqashid al-Syariah, particularly hifdz al-din, al-nafs, al-aql, al-nasl, al-mal, and al-bi'ah, with the pillars of green economy, such as resource efficiency, low carbon, and social inclusiveness. It was found that Maqashid al-Shariah provides a robust theological foundation for responsible environmental management and sustainable economic practices, both essential to disaster resilience. This article also identifies Islamic financial instruments, such as Green Sukuk, as a potential financing mechanism for flood-mitigation and adaptation projects. Policy recommendations include strengthening Sharia-based regulations, enhancing environmental education, and strengthening multi-stakeholder collaboration to achieve a more resilient and sustainable Sumatra.

KEYWORDS

Maqashid al-Syariah; Green Economy; Disaster Resilience; Flood Mitigation

INTRODUCTION

The island of Sumatra, one of Indonesia's largest islands, is geographically and geologically highly vulnerable to various natural hazards, including floods (Rozi & Khaddafi, 2024). Hydrometeorological disasters, such as floods and landslides, have become increasingly frequent phenomena with widespread impacts on people's lives and the local and regional economy. Global climate change exacerbates this situation, leading to extreme and unpredictable rainfall patterns (Musari, 2022). Environmental degradation, particularly massive deforestation for industrial purposes such as palm oil production and unsustainable exploitation of natural resources, has eliminated forests' function as natural buffers and water reservoirs, thereby increasing the risk and impact of flooding (Iskandar & Aqbar, 2019).

This situation calls for a disaster management approach that is not only reactive but also proactive, integrated, and sustainable, with a focus on building long-term resilience. Conventional approaches to disaster management often focus on emergency response and physical rehabilitation, but usually ignore the deep-rooted environmental and socioeconomic problems. Therefore, there is a need for a more holistic framework that considers not only technical and economic aspects but also ethical, social, and spiritual dimensions (Putra et al., 2023).

The concept of a green economy has been recognized as a promising development paradigm. A green economy is defined as an economy that increases human welfare and social equity while significantly reducing environmental risks and ecological scarcity (Latifah, 2024). Its main principles include

resource efficiency, low-carbon emissions, social inclusiveness, and resilience to climate change (Napsiah & Sanityastuti, 2025). This concept aims to integrate economic sectors to achieve responsible use of natural resources, prevent pollution, and create opportunities to improve social welfare. This aligns with efforts to achieve the Sustainable Development Goals (SDGs) (Musari, 2022).

As awareness of the importance of sustainability grows, Islamic principles, particularly the Maqasid al-Shariah, provide a robust ethical and moral foundation for the implementation of a green economy. Maqasid al-Shariah, or the objectives of Sharia, aim to realize and maintain human welfare and to avoid harm (Masduqie et al., 2021). Traditionally, Maqashid al-Syariah covers the preservation of five basic things (al-kulliyat al-khamsah): religion (hifdz al-din), life (hifdz al-nafs), reason (hifdz al-aql), offspring (hifdz al-nasl), and property (hifdz al-mal). However, in its development, many contemporary scholars and Islamic thinkers have integrated environmental preservation (hifdz al-bi'ah) as an integral part, or even as a separate maqashid, given the environment's crucial role in the survival of humans and all creatures (Asyiqin & Akbar, 2024).

Principles such as justice (adl), balance (mizan), and maslahah, which are deeply rooted in Islamic teachings, are highly relevant to the goals of a green economy and to efforts to build disaster resilience (Pandikar et al., 2024). Islam emphasizes that humans are khalifah (leaders and stewards) on earth, entrusted with maintaining the balance of nature and utilizing it responsibly, not destroying it. Given the urgency of the flood problem in Sumatra, the potential of the green economy as a solution, and Maqasid al-Shariah as an ethical framework, this article argues that integrating these three elements can yield more effective and sustainable policies for building flood disaster resilience in Sumatra. This integration will create synergy between economic development, environmental protection, and spiritual values, which will ultimately improve community welfare and reduce the negative impacts of disasters.

Maqasid al-Shariah is the philosophical and ethical foundation of Islamic law, referring to the noble objectives of Sharia in protecting the interests of individuals and society and preventing harm. Imam al-Shatibi, one of the leading scholars in this field, classified Maqasid al-Shariah into three levels: first, dharuriyyat (Primary/Essential), comprising fundamental matters that are necessary for human survival and social order. These include the preservation of religion (hifdz al-din), life (hifdz al-nafs), intellect (hifdz al-aql), lineage (hifdz al-nasl), and property (hifdz al-mal); Second, hajiyyat (secondary/complementary): things that are necessary to eliminate difficulties and make life easier, so as not to cause chaos or suffering, even though their absence does not threaten existence; Third, tahsiniyyat (Tertiary/Perfective): Things that serve to improve the quality of life and fulfill ethical and aesthetic demands (Wahid, 2021).

This study aims to comprehensively analyze the role of Maqasid al-Shariah in the development and implementation of green economic policies to enhance the resilience of communities and ecosystems in Sumatra to flood disasters. Specifically, this study will: first, analyze the integration of Green Sharia Economics and Maqashid al-Syari'ah in responding to floods in Sumatra in 2025; elaborate on the role of Maqashid al-Syari'ah in Green Sharia Economic policies for flood resilience in Sumatra; Third, efforts that can be made for sustainable natural resource management from the perspective of Fiqh Bi'ah.

METHODS

This research is qualitative, combining normative and empirical aspects. This study aims to conduct an in-depth exploration of the Green Sharia Economy and Fiqh Bi'ah frameworks, which are also linked to Maqashid al-Syari'ah in the context of floods in Sumatra. The research design will be descriptive-analytical, seeking to understand the phenomena, concepts, and relationships among Islamic economic principles, environmental ethics, and disaster response mechanisms. A case study approach, focusing on specific events or areas in Sumatra affected by flooding, can provide

a rich understanding of how Islamic social finance and Fiqh Bi'ah principles are applied in practice.

Data for this study will be collected through a comprehensive literature review, sourced from the Qur'an and Hadith as primary sources for the principles of Fiqh Bi'ah, as well as secondary sources such as academic journals, books, government reports, and institutional publications relevant to Sharia Green Economy, disaster management in Indonesia, and Islamic social finance. The collected data will be analyzed using qualitative content analysis, thematic analysis, and comparative methods. Content analysis will be applied to examine Islamic texts, policies, and relevant literature to identify key concepts and frameworks. Thematic analysis will help identify recurring patterns and themes related to the implementation of Islamic green economy principles and environmental ethics in disaster response. At the same time, a comparative approach can highlight both similarities and differences between theoretical principles and practical applications. The analytical framework will be based on Maqasid al-Shari'ah (the objectives of Sharia) to assess the extent to which these initiatives achieve *maslahah* (public interest) and environmental sustainability.

RESULT AND DISCUSSION

Integration of Sharia Green Economy and Maqashid al-Shari'ah in Responding to Flood Disasters in Sumatra

The principles of Green Sharia Economics can be effectively integrated and applied to respond to the frequent floods in the Sumatra region, drawing on the theoretical basis of Fiqh Bi'ah (Islamic environmental jurisprudence). The 2025 flood disaster in Sumatra affected the community and the environment, underscoring the need for an innovative approach that integrates environmental sustainability with religious ethics. This section will also briefly introduce the concept of Green Sharia Economics as a sustainable economic framework rooted in Islamic values, and Fiqh Bi'ah as the basis for

Islamic ethics and law for environmental protection.

Sharia Green Economy is an economic approach that integrates Islamic values and principles with the goals of sustainable development and environmental protection. This concept views humans as *khalifah* (stewards) on earth, responsible for the welfare of all creatures and the environment (Prilijayanti, 2023). Key Principles and Objectives: The Sharia Green Economy is grounded in Islamic sharia principles that promote ethical, fair, and environmentally responsible economic practices (Dewi et al., 2024). First, balance: Islamic economics emphasizes maintaining ecosystem balance. This principle is a reference in Islamic finance, which demands maintaining balance and ecosystems (Almurni, 2024); second, public interest. The goal is to achieve goodness and prevent harm to the entire community.

This aligns with the goal of a green economy to prevent environmental damage through sustainable economic development and consideration of environmental and community welfare (Fitrah & Soemitra, 2022). Third, justice: prioritizing social and economic justice, as well as the equitable distribution of wealth (Juwita, 2017). Fourth, prohibition of environmental destruction: Islam prohibits acts that destroy or waste natural resources, such as pollution and deforestation, because they can cause ecological damage (M. M. Wulandari & Jati, 2023). Nature is regarded as a trust that must not be abused or overexploited (Sunardi et al., 2023). Fifth, *Tawazun* encompasses the balance between material and spiritual aspects, private and public, the financial and real sectors, business and social spheres, as well as the utilization and preservation of the environment (Nasir et al., 2022).

To implement the Green Islamic Economy, various Islamic financial instruments are utilized to support environmentally friendly investments and sustainable projects. First, Green Sukuk: an innovation in sukuk that adheres to Sharia principles. Funds collected from

investors are allocated to finance environmentally friendly and halal projects, such as renewable energy development, waste management, and energy efficiency (Yulitasari et al., 2024). Green Sukuk can encourage innovation and creativity in product development and new techniques for sustainability. Second, zakat, waqf, and sadaqah: These Islamic social finance instruments have significant potential to mobilize resources to support green initiatives and disaster response. Zakat, waqf, and sadaqah can be used to help communities affected by disasters and fund sustainable development projects (Al-Daihani et al., 2025). Second, Sharia Green Banking: this concept integrates Islamic banking with green banking to fund projects aligned with Environmental, Social, and Governance principles and the SDGs (Aripin, 2025).

Relevance to Sustainable Development (SDGs): Green Sharia Economics is highly aligned with Sustainable Development Goals. Islamic legal principles emphasize social justice, responsible resource management, and environmental protection, thereby supporting global sustainability goals. Islamic economics, with its focus on Maqasid al-Shari'ah (sharia objectives), such as *maslahah* (public interest), is strongly aligned with the SDGs and can be a key driver of their achievement (Iskandar & Aqbar, 2019). The green economy offers a path to sustainable development by balancing economic growth with environmental protection and social justice.

This concept first gained popularity through a UNEP report and has become a key agenda item in global efforts to address the climate crisis. The main principles of the green economy include: First, resource efficiency: optimal use of resources to reduce waste and environmental impact; Second, low carbon: transition to renewable energy sources and industrial practices that reduce greenhouse gas emissions; Third, social inclusiveness: ensuring that the benefits of the green economy are distributed fairly and creating decent job opportunities for all layers of society (Iskandar & Aqbar, 2019); Fourth, resilience to climate change: developing economic and social systems

that can adapt and recover from the impacts of climate change (Grahesti et al., 2022). Indonesia, which is vulnerable to disasters and climate change, makes green economic development highly relevant. These efforts include improving environmental quality, enhancing disaster resilience, and developing low-carbon initiatives (Juwita, 2017).

Disaster resilience is the ability of a community to anticipate, respond to, and recover from the impacts of disasters, as well as transform itself for the better. In the face of flooding in Sumatra, disaster resilience encompasses not only physical infrastructure development but also social, economic, and institutional capacity. Key aspects of disaster resilience include: 1) Mitigation: efforts to reduce the risk and impact of disasters, such as reforestation, watershed management, and the development of sound drainage systems; 2) Adaptation: adjusting natural and human systems to the actual or expected impacts of climate change; Preparedness: planning and preparation to respond effectively to disasters, including early warning systems and community education; 3) Response: actions taken during and immediately after a disaster to save lives and property; 4) Recovery: the process of restoring post-disaster communities to their original state or better (E. Wulandari et al., 2024).

The integration of Maqasid al-Shariah and the green economy offers a robust and ethical framework for building flood-disaster resilience in Sumatra. This synergy is based on the fundamental alignment between sharia objectives and the principles of sustainability (Sulfinadia & Roszi, 2024). Although traditionally the five main maqashid do not explicitly mention the environment, many contemporary scholars argue that environmental preservation (*hifdz al-bi'ah*) is intrinsically contained within the five maqashid or can even be considered an independent maqashid (Asyiqin & Akbar, 2024). Environmental damage, such as deforestation and pollution, directly threatens religion (by impairing the ability to worship), life (through disasters and disease), intellect (through disruption of concentration and education),

offspring (through a degraded environmental legacy), and wealth (through economic losses from disasters). Therefore, protecting the environment is integral to efforts to preserve these five maqashid.

Islam teaches the concept of tauhid, that everything comes from Allah SWT, and humans are entrusted as caliphs on earth. This concept of the caliphate entails a great responsibility to manage and protect the world fairly and sustainably, rather than to destroy it. The Qur'an and Hadith contain numerous teachings that promote nature conservation and prevent environmental degradation. The principle of al-'adalah (justice) is also a necessary foundation, meaning refraining from oppressing nature and the environment (Munawarah, 2021). Islamic principles centered on justice, balance, and benefit align with the core principles of the green economy. Justice (adl) in Islam demands the equitable distribution of resources and the protection of the rights of all creatures, in line with social inclusiveness in the green economy. Balance (mizan) emphasizes harmony between exploitation and conservation, in accordance with the principles of resource efficiency and ecological sustainability. (The concept of maslahah (public welfare) ensures that all economic activities not only benefit certain parties, but also bring benefits to the environment and society as a whole (Al-Roubaie & Sarea, 2019). Therefore, the green economy is not just an economic approach, but also an expression of Islamic spiritual and ethical values.

The Role of Maqashid al-Syariah in Green Economic Policy for Flood Resilience

The implementation of Maqasid al-Shariah in green economic policy in Sumatra can be achieved through several key aspects: first, hifdh al-din. Maintaining religion in this context entails instilling environmental awareness and ethics as integral to faith. Education on human responsibility as caliphs on earth, who are commanded to maintain the balance of nature

and prevent destruction, is essential (Putra et al., 2023). When people understand that protecting the environment is part of worship, their motivation to engage in green economic practices and flood-mitigation efforts will increase. This also includes the role of religious institutions, such as mosques, in initiating disaster mitigation and environmental education programs.

Second, hifdz al-nafs, protecting lives from the dangers of floods, is a top priority. Green economic policies that are in line with hifdu nafs must focus on: 1) Disaster-Resilient Infrastructure Development: Investment in green infrastructure that can reduce flood risks, such as natural dams, embankments, and effective drainage systems; 2) Early Warning Systems: Development and implementation of accurate flood early warning systems that are easily accessible to the community; 3) Provision of a healthy environment: Reducing pollution and environmental degradation that can cause disease and worsen the health conditions of the community after flooding; 4) Community Preparedness: Training and empowering the community to deal with disasters, as has been done in several villages in West Sumatra (Rozi et al., 2021).

Third, hifdz al-aql, the preservation of reason, encourages the development of science, technology, and education. In this context, hifdu aql advocates: 1) Green Research and Innovation: Supporting research and development of environmentally friendly technologies for flood mitigation and adaptation, such as advanced hydrological monitoring systems, reforestation techniques, and extreme weather prediction models; 2) Sharia-Based Environmental Education: Integrating Islamic values regarding the environment into formal and non-formal education curricula to shape an environmentally conscious generation; 3) Community Capacity Building: Training communities in sustainable agricultural practices, waste management, and disaster-resistant construction techniques.

Fourth, hifdz al-nasl, which requires that resources and the environment be preserved for

the sake of future generations. This means: 1) sustainable natural resource management: policies that prevent excessive deforestation, monitor illegal mining, and promote sustainable forestry practices in Sumatra; 2) disaster risk-based spatial planning: developing spatial plans that take into account vulnerability to flooding and protect water catchment areas and important ecosystems; 3) Long-term investment: encouraging investment in projects that have a long-term positive impact on the environment and disaster resilience, for the welfare of future generations (Nasir et al., 2022).

Fourth, *hifdz al-mal*. The preservation of wealth in Islam not only entails the accumulation of wealth but also the wise, fair, and productive management of it. (et al., 2022) For flood disaster resilience, *Hifdz al-Mal* encourages: 1) Sharia Green Investment: utilizing sharia financial instruments such as Green Sukuk to finance green infrastructure projects, flood mitigation, and climate change adaptation (Grahesti et al., 2022). Indonesia has become a pioneer in the issuance of global and retail Green Sukuk, demonstrating the great potential of this instrument to finance green sectors that focus on disaster resilience; 2) Sharia Financial Risk Management: Developing sharia insurance (*takaful*) products that can protect the community from financial losses due to flooding; 3) Zakat, *infaq*, *sadaqah*, and *waqf*: optimizing these Islamic social funds to support post-disaster recovery programs, economic empowerment of affected communities, and environmental initiatives (Hulwati et al., 2024); 4) Sustainable economic practices: encouraging the private sector to adopt environmentally friendly and socially responsible business practices, such as waste management that produces biopellets (refuse-derived fuel) (Ernawati et al., 2025).

Fifth, *hifdz al-bi'ah*. Explicitly, environmental conservation (*hifdz al-bi'ah*) emphasizes the importance of preserving natural ecosystems. In the context of Sumatra, this means: 1) Forest Conservation and Restoration: Protecting remaining forests and reforesting critical areas to restore hydrological functions and prevent soil erosion (Munawarah, 2021).

Integrated Watershed Management: Applying a holistic approach to river and surrounding area management to reduce flood risk and maintain biodiversity; 3) Environmental Education and Advocacy: Raising public awareness about the importance of protecting the environment as part of faith and mutual benefit; 4) By integrating *Maqashid al-Syariah* into every aspect of green economic policy, Sumatra can build a solid foundation for sustainable, equitable, and spiritually-based flood disaster resilience.

The integration of *Maqasid al-Shariah* and the green economy for flood disaster resilience in Sumatra is not merely a theoretical concept; it is already being implemented through various initiatives by the government, communities, and financial institutions. This section outlines several relevant case studies and implementation models in Sumatra, highlighting how Islamic values can strengthen green economic policies in the context of flood disasters. One concrete example of the implementation of green economic policies based on Sharia principles is the issuance of Green Sukuk by the Indonesian government (Musari & Hidayat, 2023). Green Sukuk is a Sharia financial instrument whose proceeds are used exclusively to finance or refinance green projects that meet sustainability criteria. These projects generally support the transition to low-emission economic growth and climate resilience, including mitigation and adaptation projects to address the impacts of climate change in disaster-prone areas (Fitrah & Soemitra, 2022).

The issuance of Green Sukuk in Indonesia is not only considered legal from a Sharia Fiqh perspective, but also highly compatible with the values of *Maqashid al-Syariah* within the framework of *al-kulliyah al-khamsah*, namely protecting religion (*hifdz al-din*), protecting life (*hifdz al-nafs*), preserving reason (*hifdz al-aql*), preserving offspring (*hifdz an-nasl*), and preserving wealth (*hifdz al-mal*) (Rohmah et al., 2020). Given Sumatra's high flood risk, funds from Green Sukuk can be allocated to finance vital projects, including, first, Integrated Watershed Management, including upstream reforestation, construction of check dams, and river

normalization to reduce water discharge during high rainfall. This is in line with *hifdz al-bi'ah* and *hifdz nafs*. Second, Green Infrastructure Development: construction of natural drainage systems, green open spaces for absorption, and disaster-resistant buildings and bridges. This supports *hifdz al-nafs* and *hifdz al-mal*. Third, Renewable Energy and Energy Efficiency (): Although not directly related to flood mitigation, investment in this sector reduces the carbon footprint, which is the root cause of climate change and extreme weather, thereby indirectly supporting disaster resilience (*hifdz nafs*). Fourth, Sustainable Agriculture: Implementing environmentally friendly agricultural practices, such as agroforestry, can help conserve soil and water, reduce erosion, and minimize the risk of flooding on agricultural land. This is in line with *hifdz al-bi'ah* and *hifdz mal*.

Sumatra, as one of the regions highly vulnerable to hydrometeorological disasters, would benefit significantly from financing instruments such as Green Sukuk. This demonstrates Indonesia's commitment to integrating sustainable development with sharia finance principles to address the impacts of climate change, including droughts and floods that have adverse economic effects (Firdaus, 2022).

In West Sumatra, a community-based disaster management (CBDM) model has been developed that actively involves the community in disaster mitigation and preparedness efforts (Rozi et al., 2021). This model integrates the religious values and local wisdom of the Minangkabau people in dealing with natural hazards. This approach is relevant to Maqasid al-Shariah because it directly seeks to preserve life (*hifdz al-nafs*) by promoting active community participation in reducing disaster risk. Examples of implementation include: first, Mosque/Surau-Based Disaster Education and Training: Mosques and suraus, as centers of religious communities, can play a central role in disseminating information, education, and disaster preparedness training. This aligns with *hifdz din*

(instilling a holistic religious awareness of the environment) and *hifdz al-aql* (enhancing knowledge and capacity). Although specific examples in Sumatra require further exploration, case studies from Yogyakarta demonstrate the critical role of mosques in disaster mitigation. Second, Utilization of Local Wisdom: Communities in Sumatra often rely on local knowledge to manage the environment and address disasters, such as a mutual assistance system for cleaning waterways or a tradition of planting trees in landslide-prone areas. Integrating this local wisdom with modern scientific approaches can produce more effective mitigation solutions that are accepted by the community. Third, Community-Based Early Warning Systems: The development and management of early warning systems that involve the active participation of local communities, so that information on flood risks can be conveyed quickly and accurately, minimizing casualties and property losses (*hifdz al-nafs* and *hifdz al-mal*).

Efforts to Manage Natural Resources Sustainably from a Fiqh Bi'ah Perspective

Severe environmental degradation, such as deforestation and irresponsible mining in Sumatra, has disrupted the Earth's hydrological cycle, triggering floods, water crises, and landslides (Munawarah, 2021). This condition highlights the urgency of applying the principles of Fiqh Bi'ah or Islamic environmental law. The implementation of Fiqh Bi'ah in Sumatra can be achieved through, first, Forest Conservation and Restoration Programs: policies that prevent illegal deforestation and promote reforestation in upstream river areas and protected areas. This is a fundamental manifestation of *hifdz al-bi'ah*. First, Integrated Waste Management: Encouraging sustainable waste management practices, such as processing solid waste into biopellets (Refuse-Derived Fuel/RDF) (Ernawati et al., 2025), which reduces waste volume and provides an alternative energy source. Although this example is from Balikpapan, the concept can be replicated in Sumatra as part of a green

economy that reduces pollution and environmental degradation, thereby reducing the risk of disasters and diseases (hifdz al-nafs). Second, Sharia-Based Environmental Law Enforcement: Encourage stricter regulations against environmental destroyers and integrate Islamic environmental justice values into law enforcement. The principle of al-'adalah in Islam prohibits mistreating nature and the environment, thereby demanding accountability for violators (Munawarah, 2021).

Although there is great potential in integrating Maqashid al-Syariah and the green economy, its implementation in Sumatra faces several challenges: 1) Lack of Awareness and Understanding: Many parties still do not fully understand the connection between sharia principles and environmental issues and the green economy; 2) Multi-Sector Coordination: Strong coordination is needed between various government agencies, religious institutions, the private sector, and civil society; 3) Availability of Data and Research: (Iskandar & Aqbar, 2019) There is a need for more comprehensive data and in-depth research on the effectiveness of implementing these models in Sumatra.

However, these challenges also open up great opportunities: 1) Development of Educational Curriculum: Developing Sharia-based environmental education modules for schools and madrasas; 2) Sharia Financial Innovation: Developing more diverse Sharia financial instruments for environmental and climate adaptation projects; 3) Strengthening the Role of Religious Institutions: Further empowering the role of mosques and Islamic organizations in the advocacy and implementation of environmental programs. Through collaborative and consistent efforts, Sumatra can become a model for implementing green economic policies grounded in Maqasid al-Sharia, enhancing resilience to floods and achieving sustainable and equitable development.

The contribution of the Green Economy to fulfilling Maqashid Syariah and flood resilience offers concrete solutions to address violations of

Maqashid al-Syariah caused by flooding and environmental degradation: first, Environmental Restoration: Reforestation and rehabilitation programs for critical land in Sumatra, as part of the green economy, directly restore the hydrological functions of forests, reduce the risk of flooding, and thus contribute to hifdz al-nafs, hifdz al-mal, and hifdz al-bi'ah. Second, Sustainable Investment: The use of Green Sukuk to finance climate mitigation and adaptation projects ensures that economic development does not harm the environment but rather protects it (Musari, 2022). This is an application of hifdz mal with a hifdz al-bi'ah dimension, shifting investment from environmentally destructive projects to sustainable projects; Third, Green Infrastructure Development: Environmentally friendly infrastructure development, such as urban parks as water catchments or sustainable transportation systems, supports urban resilience to flooding while improving quality of life, in line with hifdz al-nafs and hifdz al-mal (Masduqie et al., 2021)

Fifth, Sustainable Local Economy: Encouraging organic farming, ecotourism, and environmentally friendly industries in Sumatra can create new jobs, increase sustainable community income, and reduce pressure on natural resources. This is a form of hifdz al-mal that also supports hifdz al-nafs by improving welfare. Sixth, Environmental Education and Awareness: Educational campaigns on the importance of a clean and safe environment, reinforced by Islamic values of responsibility as khalifah, will increase the community's collective capacity to maintain environmental hifdz al-s and to participate in disaster mitigation efforts. This supports hifdz al-aql and hifdz al-din.

Holistic Integration of Maqashid al-Syariah and the Green Economy: The concept of the green economy is comprehensively integrated into the ethical framework of Maqashid al-Syariah. This is not merely the addition of Sharia elements; instead, it positions hifdz al-bi'ah (environmental preservation) as the core of all maqashid, demonstrating ethical depth in sustainability strategies. The focus on flood disaster resilience is a specific application of

this framework, aimed at building sustainable flood resilience and providing targeted, relevant solutions to pressing environmental issues. Therefore, Fiqh Bi'ah provides a concrete implementation of Fiqh Bi'ah in a specific location, namely Sumatra. This includes forest conservation programs, integrated waste management, and Sharia-based environmental law enforcement that incorporates the principle of al-'adalah. The emphasis on specific locations and clear programs demonstrates an effort to translate theory into contextually relevant practice.

Strengthening Sharia-based Environmental Regulation and Law Enforcement: Local governments in Sumatra should adopt stricter regulations on deforestation, illegal mining, and pollution, integrating the principles of Fiqh Bi'ah, which emphasize the prohibition of destruction (mafsadah) and the obligation to protect the public interest. Sanctions for environmental violators must be enforced without exception (Juwita, 2017). **Optimal Utilization of Green Sukuk for Flood Resilience Projects:** Encourage central and regional governments to continue increasing Green Sukuk issuance and to allocate funds specifically to flood mitigation and adaptation projects in Sumatra, such as large-scale reforestation, watershed management, and green infrastructure development.

Development of a Sharia-based green community economy: support sustainable local economic initiatives, such as organic farming, community-based ecotourism, and waste-to-energy management. These programs must be accompanied by Maqashid Syariah education to ensure public awareness and active participation. **Religion-Based Environmental Education and Campaigns:** Engage religious institutions (mosques, Islamic boarding schools, majelis taklim) and religious leaders in disseminating understanding of the importance of environmental protection as part of faith and worship. Educational materials should emphasize the role of khalifah and the concept of

maslahah in the context of nature conservation.

1) **Strengthening Research and Innovation in Fiqh Bi'ah and Green Economy:** Supporting scientific research that examines in depth the application of Fiqh Bi'ah in the context of the modern environment and the development of green economy models that are appropriate to the specific conditions of Sumatra; 2) **Increasing Community Capacity and Preparedness:** Continue to develop and support community-based disaster management models, integrating local wisdom and Islamic values, and ensuring effective early warning systems.

The floods and galodo (flash floods/cold lava) that have recently hit Sumatra have caused enormous material and non-material losses. These events have not only left grief but also invited deep reflection on the relationship between humans and the environment. In this context, the Islamic framework of thought, through Fiqh Bi'ah (Islamic environmental jurisprudence) and Maqashid Syariah (the objectives of Islamic law), offers a comprehensive perspective for analyzing the causes, impacts, and sustainable solutions to this environmental crisis.

Maqashid Syariah are the noble goals that Islamic law seeks to achieve. Traditionally, Maqasid al-Shariah include the preservation of religion (hifz al-din), life (hifz al-nafs), intellect (hifz al-'aql), lineage (hifz al-nasl), and wealth (hifz al-mal). In the modern context, particularly amid global climate change and environmental crises, scholars have recognized hifdz al-bi'ah (preservation of the environment) as an integral, even foundational, component of Maqashid Syariah (Aslati & Silawati, 2019). The positioning of hifdz al-bi'ah as a crucial maqasid is grounded in the argument that environmental sustainability is an absolute prerequisite for preserving the other five maqasid. How can religion, soul, intellect, lineage, and wealth be preserved if the environment in which humans live is damaged and no longer supports life? Therefore, hifdz al-bi'ah serves as the foundation for the implementation of other maqasid.

In addition, the principle of al-'adalah (justice) is integral to the Maqashid al-Shariah and highly relevant. Islam prohibits acts of cruelty towards nature and the environment (al-'adalah in ecological interpretation) (Latifah, 2024). Any action that harms the environment and causes disaster constitutes an injustice to nature, other humans, and future generations. The principle of maslahah mursalah (public interest) also emphasizes that environmental protection is part of the public interest that must be prioritized.

Floods and landslides in Sumatra, according to various studies, are closely related to human activities and environmental damage. Deforestation, irresponsible mining, land-use changes, and indiscriminate waste disposal have disrupted Earth's functioning as a water reservoir. Damage to upstream areas, such as deforestation, has led to increased runoff and reduced river capacity, thereby triggering flash floods, especially during high rainfall (Maysithoh, 2024). From the perspectives of Fiqh Bi'ah and Maqashid Syariah, the occurrence of this disaster can be analyzed as follows: First, Violation of hifdz al-bi'ah: activities such as deforestation and illegal mining directly contravene the principle of hifdz al-bi'ah. Humans, as khalifah entrusted with caring for the earth, have failed to fulfill their responsibilities and have even become the primary agents of environmental destruction (Firmansyah et al., 2023). This destruction threatens the survival of humans (hifz al-nafs) and future generations (hifz al-nasl).

Second, Non-compliance with Mizan and Amanah: Excessive exploitation of natural resources without considering ecological balance shows non-compliance with the principle of mizan and betrayal of Allah's amanah. A damaged environment is no longer able to function optimally, for example, by retaining water, which can lead to disasters. Third, Violation of al-'Adalah and Maslahah Mursalah: Parties involved in environmental destruction, such as illegal logging or mining without permits, have acted unjustly (al-'adalah) towards the environment and the affected communities. The adverse effects of floods and landslides, ranging from loss of life

and property to infrastructure damage, are direct consequences of the failure to maintain maslahah mursalah (public interest) in environmental protection. These actions reflect destruction and injustice that are not in line with Islamic law. Third, Neglect of the Principles of Israf and Taharah: The indiscriminate disposal of waste that clogs waterways and exacerbates flooding is a form of waste of resources and environmental pollution that is contrary to the teachings of israf and taharah.

CONCLUSION

The integration of *Maqashid al-Shariah with the concept of the green economy* offers a comprehensive and ethical framework for building sustainable resilience to flood disasters. This approach places environmental preservation (*hifdz al-bi'ah*) at the core of all *maqashid*, emphasizing the urgency of collective action based on spiritual values and sustainable economic principles. The implementation of *Fiqh Bi'ah* in Sumatra can be realized through forest conservation and restoration programs. Meanwhile, integrated waste management and Sharia-based environmental law enforcement that incorporates the principle of al-'adalah can prevent ecological degradation and hold violators accountable.

Its novelty lies in the specific integration and practical implementation of the Islamic ethical-spiritual framework (*Maqashid Syariah* and *Fiqh Bi'ah*) with the concept of green economy to address environmental disasters (floods) in specific geographical areas.

REFERENCE

Al-Daihani, M., Dirie, K. A., Muneem, A., Lateb, N. A., & Bouteraa, M. (2025). Islamic social finance and its potential in addressing natural disaster emergencies and advancing sustainable development goals: A proposed model. *International Journal of Ethics and Systems*.

<https://doi.org/10.1108/ijoes-05-2024-0138>

<https://doi.org/10.20885/tullab.vol6.iss1.art8>

- Almurni, M. F. (2024). Prospek Implementasi Green Economy dalam Perspektif Ekonomi Islam. *AL-AMWAL: Jurnal Ekonomi dan Perbankan Syariah*, 2(2), 40–46.
- Al-Roubaie, A., & Sarea, A. (2019). Building capacity for a green economy: the role of Islamic finance. *Tafhim ikim journal of Islam and the Contemporary World*, 12(2), 1–29.
<https://doi.org/10.56389/tafhim.vol12no2.1>
- Aripin, I. T. (2025). Ayat-ayat al-quran tentang pemeliharaan lingkungan. *Ahwaluna*, 6(1), 149–164.
<https://doi.org/10.70143/ahwalunajurnalhukumkeluargaislam.v6i1.459>
- Aslati, A., & Silawati, S. (2019). Korelasi Hukum Pidana Islam Dengan Hukum Positif Indonesia Tentang Sanksi Terhadap Pembakaran Hutan Dan Lahan Studi Terhadap Fenomena Kebakaran Hutan dan Lahan di Provinsi Riau. *Nusantara Journal for Southeast Asian Islamic Studies*, 15(1), 29–29.
<https://doi.org/10.24014/nusantara.v15i1.10611>
- Asyiqin, I. Z., & Akbar, M. (2024). Integrating Sharia Principles with Environmental Sustainability: A DSN-MUI Fatwa Analysis in Islamic Capital Markets. *E3S Web of Conferences*, 594, 4007–4007.
<https://doi.org/10.1051/e3sconf/202459404007>
- AZZAHRA, S., & Maysithoh, S. (2024). peran muslim dalam dalam pelestarian lingkungan: ajaran dan praktik. *At-Thullab Jurnal Mahasiswa Studi Islam*, 6(1), 1568–1579.
- Dewi, S. P., Sulfinadia, H., & Efrinaldi, E. (2024). Sistem Kontrak Perdagangan pada Bursa Berjangka Jakarta (Commodity Exchange) dalam Perspektif Hukum Islam. *Jurnal Hukum Ekonomi Syariah*, 7(1), 17–34.
- Ernawati, L., Ginting, R. R., Lestari, R., Raihan, M., Sianturi, H. G., Kurniawati, D. M., Amrullah, A., Farobie, O., & Prawisudha, P. (2025, Juni). *pengolahan sampah padat tpas manggar menjadi produk biopellet (refuse-derived fuel) dengan mesin pelletizer berbasis sistem penggerak roller*.
<https://doi.org/10.31764/jmm.v9i3.31314>
- Firdaus, S. (2022). Al-qur'an dan pembangunan lingkungan berkelanjutan di indonesia: analisis maqashid syariah untuk pencapaian sdgs. *Al-Mustashfa Jurnal Penelitian Hukum Ekonomi Syariah*, 7(2), 120–120.
<https://doi.org/10.24235/jm.v7i2.11594>
- Fitrah, R., & Soemitra, A. (2022). Green Sukuk For Sustainable Development Goals in Indonesia: A Literature Study. *Jurnal ilmiah ekonomi islam*, 8(1), 231–231.
<https://doi.org/10.29040/jiei.v8i1.4591>
- Grahesti, A., Nafii'ah, D. F., & Pramuningtyas, E. (2022). Green Sukuk: Investasi Hijau Berbasis Syariah Dalam Mewujudkan Ketahanan Terhadap Perubahan Iklim Di Indonesia. *Jurnal Ilmiah Ekonomi Islam*, 8(3), 3374–3374.
<https://doi.org/10.29040/jiei.v8i3.6443>
- Hamda, S. (2014). Aplikasi akad murabahah pada bank pembiayaan rakyat syari'ah (bprs) haji miskin. *Al-masharif jurnal ilmu ekonomi dan keislaman*.
<https://scholar.uinib.ac.id/id/eprint/105/>

- Hudayarizka, R., Wulandari, A. P., Ariani, I. K., & Yorika, R. (2024). Analisis Variasi Ukuran Partikel Biomassa Cangkang Kelapa Sawit dan Tandan Kosong Kelapa Sawit (TKKS) terhadap Karakteristik Refuse Derived-Fuel (RDF). *SPECTA Journal of Technology*, 8(3), 210–222. <https://doi.org/10.35718/specta.v8i3.1212>
- Hulwati, H., Andespa, R., Mujiono, S., & Syofyan, A. (2024). Zakat for Humanity in Disaster Mitigation. *International Journal of Sustainable Development and Planning*, 19(5), 1929–1939. <https://doi.org/10.18280/ijstdp.190531>
- Iskandar, A., & Aqbar, K. (2019). Green Economy Indonesia Dalam Perspektif Maqashid Syari'ah. *Al-Mashrafiyah Jurnal Ekonomi Keuangan dan Perbankan Syariah*, 3(2), 83–83. <https://doi.org/10.24252/al-mashrafiyah.v3i2.9576>
- Juwita, D. R. (2017). Fiqh Lingkungan Hidup dalam Perspektif Islam. *El-Wasathiya Jurnal Studi Agama*, 5(1), 27–42. <https://doi.org/10.35888/el-wasathiya.v5i1.3025>
- Kurniawan, A., & Hudafi, H. (2021). Konsep Maqashid Syariah Imam Asy-Syatibi Dalam Kitab Al-Muwafaqat. *Al-Mabsut: Jurnal Studi Islam dan Sosial*, 15(1), 29–38.
- Latifah, E. (2024). Fiqh al-Bī'ah and the Concept of Green and Blue Economy for Achieving Sustainable Development in the Context of SDGs. *Invest Journal of Sharia & Economic Law*, 4(1), 74–99. <https://doi.org/10.21154/invest.v4i1.7732>
- Masduqie, M. H. A., Syarifudin, S., & Yudha, A. T. R. C. (2021). Green economy of waste bank in the perspective of maqashid sharia in surabaya. *Jurnal Ekonomi Syariah Teori dan Terapan*, 8(5), 593–593. <https://doi.org/10.20473/vol8iss20215pp593-606>
- Munawarah, M. (2021). Esensi dan urgensi bumi sebagai reservoir air (tinjauan tafsir ekologi). *Mudşarah Jurnal Kajian Islam Kontemporer*, 3(1), 36–36. <https://doi.org/10.18592/msr.v3i1.4956>
- Musari, K. (2022). Integrating Green Sukuk and Cash Waqf Linked Sukuk, the Blended Islamic Finance of Fiscal Instrument in Indonesia: A Proposed Model for Fighting Climate Change. *International Journal of Islamic Khazanah*, 12(2), 133–144. <https://doi.org/10.15575/ijik.v12i2.17750>
- Musari, K., & Hidayat, S. E. (2023). The Role of Green Sukuk in Maqasid Al-Shariah and SDGs: Evidence from Indonesia. Dalam *Palgrave CIBFR studies in Islamic finance* (hlm. 181–203). Springer International Publishing. https://doi.org/10.1007/978-3-031-13302-2_9
- Napsiah, N., & Sanityastuti, M. S. (2025). Disaster Mitigation Based on Mosques: A Case Study of Community Experiences in Disaster-Prone Areas of Yogyakarta. *Society*, 13(1), 275–290. <https://doi.org/10.33019/society.v13i1.798>
- Nasir, N. M., Nair, M. S., & Ahmed, P. K. (2022). Environmental sustainability and contemporary Islamic society: A Shariah perspective. *Asian Academy of Management Journal*, 27(2). <https://doi.org/10.21315/aamj2022.27.2.10>
- Pandikar, E., Affandi, I., Disman, D., & Sundawa, D. (2024). Harmonizing Economic Principles, Islamic Values, and Entrepreneurial Attitudes for a Sustainable Environment. *Yupa Historical Studies Journal*, 6(2), 188–197.

<https://doi.org/10.30872/yupa.v6i2.373>

9

tTobv&sig=92VQIb2MntJgFJNPUh4CApc
HK1o

- Prilijayanti, D. (2023). Green Economy Dalam Perspektif Fiqh Al-Bi'Ahdan Maqahid Syari'Ah (Hifzal-Nasl&Hifz Al-Mal). *Qusqazah*, 2(1), 15–26.
- Putra, D., Hasibuan, Z., & Edi, S. (2023). Islamic perspectives on environmental conservation and government policies on mitigating the natural disaster in indonesia. *Miqot Jurnal Ilmu-ilmu Keislaman*, 47(2), 186–186. <https://doi.org/10.30821/miqot.v47i2.1103>
- Rohmah, N., Rohim, A., & Herianingrum, S. (2020). Sovereign Green Sukuk Indonesia Dalam Tinjauan Maqashid Shariah. *Jurnal Penelitian IPTEKS*, 5(2), 259–269. <https://doi.org/10.32528/ipteks.v5i2.3666>
- Rozi, S., & Khaddafi, M. (2024). Dampak Pasar Karbon Terhadap Keuangan Perusahaan Dalam Konteks Kebijakan Lingkungan. *Jurnal Ilmiah Metansi (Manajemen dan Akuntansi)*, 7(2), 287–297.
- Rozi, S., Ritonga, A. R., & Januar, J. (2021, Agustus). 'Local community-based disaster management' The transformation of religious and local wisdom values in preparation to deal with natural hazards in West Sumatra, Indonesia. Dalam *Jambá Journal of Disaster Risk Studies* (Vol. 13, Nomor 1). AOSIS. <https://doi.org/10.4102/jamba.v13i1.1020>
- Sulfinadia, H., & Roszi, J. P. (2024a). *Moderasi bermazhab dalam hukum keluarga pada masyarakat Sumatera Barat*. Deepublish. <https://books.google.com/books?hl=id&lr=&id=UrMwEQAAQBAJ&oi=fnd&pg=PP1&dq=moderasi+bermazhab&ots=hh5aT>
- Sulfinadia, H., & Roszi, J. P. (2024b). Moderation of Madhhabs in West Sumatra Towards Hadhanah of Minors Whose Mothers Remarry. *El-Usrah: Jurnal Hukum Keluarga*, 7(2), 789–815.
- Sulfinadia, H., Suryani, E., Roszi, J. P., Elkhairati, E., & Tanjung, A. (2022). Shifting Cafe and Culinary Marketing Strategy in West Sumatra Islamic Business Ethics Perspective. *AL-FALAH: Journal of Islamic Economics*, 7(2), 175–194.
- Sunardi, S., Hernanda, T., Azizah, N., & Rosita, D. (2023). Environmental Protection in Indonesia: Based on Islamic Law and Epistemology *Law and Justice*, 8(1), 57–69. <https://doi.org/10.23917/laj.v8i1.635>
- Tusamma, & Izzuddin, M. (2022). Fikih Ekologi. *Wasathiyyah*, 4(2), 51–63. <https://doi.org/10.58470/wasathiyyah.v4i2.32>
- Wahid, Z. U. (2021). *Konsep Maqashid Syari'ah Kontemporer (Studi Komparasi Pemikiran Ibnu Asyur dan Alal Al-Fasi)*. https://repository.unisma.ac.id/bitstream/handle/123456789/3087/S1_FAI_HUKUM%20KELUARGA%20ISLAM_21701012015_Ziadul%20Ulum%20Wahid.pdf?squence=1
- Wulandari, E., Nasution, B., Mufiaty, H., Permana, A. Y., & Ivan, T. (2024). Ecological Disaster Recovery for Coastal Rural Community: Conservation Concept and Synergy of Coastal Settlement Spaces Post-Tsunami in Kuala Bubon Village, West Aceh Regency, Indonesia. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4847206>
- Wulandari, M. M., & Jati, B. K. H. (2023). Examining The Synergy between Al-

Mizan Principle in Shariah Economics and Green Economy: A Legal Perspective. Dalam *Advances in Social Science, Education and Humanities Research/Advances in social science, education and humanities research* (hlm. 1211–1223).
https://doi.org/10.2991/978-2-38476-164-7_111

Yulitasari, L., Ekawati, E., & Tresiana, N. (2024). Development of State Green Sukuk as Part of Creative and Innovative Financing in the Islamic Financing Market. *KnE Social Sciences*.
<https://doi.org/10.18502/kss.v9i2.15005>