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AN ANALYSIS OF SHARIA ECONOMIC LAW ON THE VALUATION OF COASTAL ECOSYSTEMS AS ECONOMIC ASSETS IN THE CARBON MARKET

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Abstrak

Carbon trading has become a market-based mechanism to reduce greenhouse gas emissions while promoting environmental sustainability. From an Islamic perspective, this mechanism can be aligned with sharia principles such as justice, barakah, and environmental stewardship. This study aims to analyze the valuation of coastal ecosystems as economic assets within the carbon market from the perspective of Sharia Economic Law. The research employs a descriptive qualitative method to examine the potential and challenges of integrating Sharia principles into carbon trading practices in Indonesia. The results demonstrate that coastal ecosystems, including mangroves, seagrass beds, and coastal wetlands, possess a significant carbon absorption capacity and substantial economic value. Their utilization in carbon markets is permissible in Islam, provided that transactions are conducted transparently and are free from *riba*, *gharar*, and *maysir*. Additionally, fairness in the distribution of benefits to coastal communities must be ensured. Carbon market governance should prioritize public welfare, environmental protection, and social justice. Therefore, sharia-based regulatory frameworks are necessary to ensure that carbon trading not only generates economic benefits but also supports sustainability and community well-being.

Keywords : *Sharia Economic Law, coastal ecosystem valuation, carbon market, blue carbon, maqasid al-shari'ah*

A. INTRODUCTION

Climate change has become one of the global issues with wide-ranging impacts on the environment, the economy, and people's lives. One of the efforts to address this problem is the implementation of a carbon

market—an economic system that assigns financial value to the reduction of greenhouse gas emissions. In this context, coastal ecosystems such as mangroves, seagrass beds, and coral reefs play an important role because they are able to

absorb and store carbon in significant quantities. Therefore, coastal ecosystems are not only valuable ecologically, but they are increasingly viewed as economic assets that can be utilized within the carbon market mechanism.¹

From the perspective of environmental economics, the functions of coastal ecosystems can be assessed through economic valuation approaches, which provide economic benefits while still maintaining environmental sustainability. Research shows that coastal ecosystems have a high capacity for carbon storage, making them highly potential for participation in carbon trading. In Indonesia, this is strengthened by Presidential Regulation Number 98 of 2021, which governs the administration of the economic value of carbon, including carbon trading. However, its implementation also raises various issues, such as unclear ownership, fairness in the distribution of benefits, and potential conflicts with local communities.²

Utilizing coastal ecosystems as economic assets offers both opportunities and challenges in practice. One major challenge is the lack of alignment between economic policies and the principles of environmental sustainability. In real-world implementation, coastal resource exploitation often prioritizes short-term gains without considering long-term impacts on the ecosystem. This may lead to environmental damage, which contradicts Islamic principles that prohibit all forms of corruption or destruction (fasad) on earth.

In Islamic economic law, every economic

activity must be grounded in the principles of justice, benefit (kemaslahatan), and transparency. Certain natural resources are also considered common property that should be utilized for the benefit of the wider community.³ whether carbon-market practices that utilize coastal ecosystems are in line with Islamic legal principles, particularly to avoid elements of ambiguity and injustice. To date, scholarly studies that link carbon markets with Islamic economic law remain limited, and thus, further research is needed. Based on the background above, the research questions of this study are as follows: (1) the role of coastal ecosystems in the absorption and storage of blue carbon, and the economic valuation of coastal ecosystems as economic assets; (2) the mechanism of the carbon market and the regulation of the economic value of carbon in Indonesia; and (3) an analysis of Islamic economic law regarding the valuation of coastal ecosystems within the carbon market.⁴

The objectives of this research are to analyze the concept of coastal ecosystems as economic assets, to explain the carbon market mechanism and its regulation in Indonesia, and to examine whether these are consistent with the principles of Islamic economic law. This research is important because it can contribute to the development of Islamic economic law scholarship that is more responsive to modern environmental issues, and it can serve as a reference for the sustainable and fair management of coastal

¹ Daniel M. Alongi, "Carbon Sequestration in Mangrove Forests," *Carbon Management* 3, no. 3 (2012): 313–22, <https://doi.org/10.4155/cmt.12.20>.

² Elfridus A L Nono, "Kajian Peranan Ekonomi Lingkungan Dalam Pembangunan Nasional," *Jurnal Ilmu Pertanian Tropis* 1, no. 1 (2024): 24–28.

³ Deni Apriana S., Daindo Milla, "Potensi Pemanfaatan Ekosistem Pesisir Pantai Labuhan Haji Lombok Timur Sebagai Daerah Ekowisata,"

Jurnal Biologi Tropis 17, no. 1 (2017), <https://doi.org/10.29303/jbt.v17i1.388>.

⁴ Ahmad Munir Hamid, "Sharia Perspective: The Urgency of Islamic Economic, Banking and Finance (IEBF) Reform in Realizing the Sustainable Development Goals (SDGs) through Knowledge Integration (IoK) Approach," *ADILLA : Jurnal Ilmiah Ekonomi Syari'ah* 7, no. 1 (2024): 111–40, <https://doi.org/10.52166/adilla.v7i1.6026>.

ecosystems.⁵

B. RESEARCH METHODOLOGY

This research is qualitative research using a library research (literature-based) approach. It aims to analyze the economic valuation of coastal ecosystems within the carbon market mechanism from the perspective of Islamic Economic Law. The study employs two main approaches: the conceptual approach and the normative approach. These approaches are used to examine the alignment between concepts in environmental economics and the principles of syari'ah.

The data used in this study are qualitative, consisting of (i) theoretical concepts, (ii) findings from previous research, and (iii) norms within Islamic Economic Law. The sources of data include primary and secondary materials. Primary data consist of the Qur'an, Hadith, and relevant fiqh muamalah literature. Secondary data include scientific journals, reference books, and policy reports relevant to carbon markets, economic valuation, and blue carbon. The literature selection criteria used in this study include: (1) relevance to the research topic, (2) publication in credible academic sources, (3) publication within the last ten years, except for foundational theories, and (4) clear methodology and scientific accountability.

Data collection is carried out through documentation study and literature study, by identifying, classifying, and synthesizing various relevant sources. Meanwhile, data analysis uses qualitative descriptive analysis, carried out through data reduction, data presentation, and conclusion. In addition, the study applies normative analysis to assess whether carbon-market practices align with syari'ah principles, as well as comparative analysis to compare conventional economic concepts with Islamic economic concepts.

The analytical framework of this study uses an Islamic Economic Law approach that includes the principles of maqashid syari'ah, justice ('adl), public interest (maslahah), and the prohibition of elements such as gharar (uncertainty), maysir (speculation), and riba. Furthermore, the concept of milkiyah 'ammah is applied to analyze the status of coastal resource ownership as common property that must be managed for the benefit of the wider community. This approach is used to evaluate whether the carbon market mechanism and the economic valuation of coastal ecosystems are consistent with syari'ah principles and oriented toward sustainability and social welfare.

C. RESULTS AND DISCUSSION

1. The Role of Coastal Ecosystems in the Absorption and Storage of Blue Carbon.

Blue carbon refers to carbon that is absorbed and stored in coastal and marine ecosystems. It includes ecosystems such as mangroves, seagrass meadows, and tidal marshes, which contribute important impacts and benefits for climate change mitigation and adaptation. Blue carbon-producing and storing ecosystems are particularly significant because they support mitigation efforts by helping meet national targets through the absorption of emissions trapped in the atmosphere. Strengthening the function of coastal and marine ecosystems can be pursued through various forms of conservation and rehabilitation to enhance the carbon sinks produced by coastal and marine vegetation. Each ecosystem type also has its own specific focus, such as mangrove forests, seagrass meadows, and tidal marshes.

Mangrove forests are coastal ecosystems dominated by trees that grow in intertidal

⁵ Peter I. Macreadie et al., "The Future of Blue Carbon Science," *Nature Communications* 10, no.

1 (2019): 1–13, <https://doi.org/10.1038/s41467-019-11693-w>.

zones. They can absorb and store carbon in the soil as well as in living and dead biomass. Mangrove forests provide ecological functions that include mitigating abrasion, flooding, and even tsunami-wave impacts; serving as habitat for living organisms such as crabs, shrimp, and small fish; regulating microclimate; acting as an effective carbon storage system through carbon stocks; and helping reduce the impacts of global warming by mitigating climate change. The process by which mangroves absorb carbon dioxide is closely linked to their biomass stored above the ground (branches, twigs, leaves, flowers, and fruits).⁶

High levels of carbon dioxide in the atmosphere are one of the causes of global climate change. One way to minimize the effects of global warming is by developing carbon sinks, where carbon is stored in the form of organic carbon produced through photosynthesis and accumulated as biomass. Mangrove ecosystems can store carbon as biomass during photosynthesis. The presence of mangrove vegetation in coastal areas is therefore strongly believed to be an effort to reduce CO₂ concentration in the atmosphere and plays a key role in climate change mitigation strategies. Mangroves are also considered a blue carbon parameter that can absorb carbon more rapidly than tropical rainforests (green carbon). Mangroves, along with tidal marshes and seagrass meadows, can store carbon for a long time—ranging from decades to millions of years. Reducing atmospheric CO₂ can be achieved through conservation and forest management in mangrove ecosystems by means of carbon storage. Emissions released into the air by mangrove forests are generally smaller than

those from terrestrial forests such as tropical rainforests. This is because decomposition of aquatic plant litter does not release carbon directly into the atmosphere, but instead transfers it into the soil. In contrast, in green carbon ecosystems such as tropical rainforests, when biomass dies, it can release up to 50% of its carbon into the atmosphere.

Seagrass meadows are ecosystems formed by broad-leaved plants that grow on the shallow seabed. Seagrass meadows function as carbon-emitting absorbers. According to BRIN (cited by Mongabay) in 2023, seagrass meadows have the potential to store approximately 600 tons of carbon per hectare, and they also provide habitat for various marine species. They contribute as carbon absorbers, transferring carbon from seawater to the atmosphere, while also acting as filters that improve water quality by trapping particles and nutrients. It is also stated that seagrass ecosystems provide important services in addressing climate change—for example, protecting coastal areas from storms and sea-level rise, preventing coastal erosion, and supporting fisheries and commercially important species, as well as threatened marine species.

Seagrass meadows accumulate carbon within their own biological tissues. Even though seagrass often covers only a portion of the sea surface, it can still store a significant amount of carbon in its tissues. The detritus of seagrass—such as dead leaves and shoots—can sink to the seabed and become buried in sediment. The carbon contained in this detritus then forms stable carbon reserves. In addition, seagrass meadows play a role in the global carbon cycle by enhancing chemical processes in the

⁶ Nurjannah Septyanun et al., “Regulasi Dan Tata Laksana Penerapan Nilai Ekonomi Karbon Berbasis Voluntary Dan Mandatory Di Nusa Tenggara Barat,” *GEOGRAPHY: Jurnal Kajian*,

water that can bind organic carbon in the form of calcium carbonate.

Tidal marshes in coastal areas experience tidal flooding that is influenced by seawater. Tidal marshes are coastal ecosystems formed by plants with fibrous roots that grow in intertidal zones. These ecosystems function to absorb and store carbon in both the soil and living and dead biomass. Tidal marshes have high carbon storage potential—around 800 tons per hectare.

Tidal marsh ecosystems also have an important role in the global carbon cycle by influencing chemical processes in water, including stabilizing organic carbon. The soils in tidal marshes can store large amounts of carbon as well. Moreover, layers of mud beneath tidal marshes can accumulate organic carbon from decomposed remains of plants and marine organisms.⁷

2. Economic Valuation of Coastal Ecosystems as Economic Assets

Economic valuation of coastal ecosystems is an approach used to measure the value of benefits generated by coastal ecosystems such as mangroves, coral reefs, and seagrass meadows. This approach is important because coastal ecosystems provide not only ecological benefits, but also tangible economic contributions to people's livelihoods. In environmental science, coastal ecosystems provide various types of ecosystem services, including provisioning services, regulating services, supporting services, and cultural services. Collectively, these services have economic value even

though they are often not directly visible within conventional market systems. Therefore, economic valuation is needed to reveal these “hidden” values, so they can serve as a foundation for development policy-making and natural resource management.⁸

Coastal ecosystems can be viewed as economic assets because they are able to generate benefits sustainably for human life. Directly, they provide a wide range of resources—such as fish, shrimp, crabs, and mangrove forest products—that coastal communities can use as sources of livelihood. Beyond direct benefits, there are also indirect benefits with substantial economic value, such as protection against coastal abrasion, tidal waves, and other natural disasters. Economically, this protective function can reduce potential losses that communities and governments would otherwise bear due to environmental degradation. Research in Merauke Regency shows that the economic value of mangrove ecosystems can reach around IDR 213 billion per year, indicating that coastal ecosystems make a major contribution to the regional economy.⁹

In measuring the economic value of coastal ecosystems, one commonly used approach is the concept of Total Economic Value (TEV). This approach breaks economic value into several components: use value (direct use value and indirect use value), option value, and non-use value. Direct use value reflects benefits that can be

⁷ Fara Diva, “Peran Blue Karbon Sebagai Solusi Berkelanjutan Untuk Penyerapan Karbon Di Wilayah Pesisir,” *Maliki Interdisciplinary Journal (MIJ) EISSN 2*, no. 8 (2024): 377–82, <http://urj.uin-malang.ac.id/index.php/mij/index>.

⁸ Alfia Risa Lestari et al., “VALUASI EKONOMI EKOSISTEM MANGROVE DI BANUA PANGKA DESA BAWALIPU KECAMATAN WOTU KABUPATEN LUWU TIMUR

PROVINSI SULAWESI SELATAN Economic Valuation Of The Mangrove Ecosystem In Banua Pangka Bawalipu Village Wotu District East Luwu District South Sulawesi Pr” 1, no. 2 (2024): 168–79.

⁹ S. W. Saputra, dan C. Ain Hirmawan. A.A., “Hirmawan,” *Jurnal Pasir Laut* 4(2), no. 2 (2020): 124–33.

consumed or utilized directly by society, such as fisheries outputs and forest products. Indirect use value is linked to ecological functions such as coastal protection and carbon sequestration. Option value represents the potential benefits that may be utilized in the future, while non-use value relates to existence value and bequest value—values that remain meaningful even when they are not directly utilized. The TEV approach allows for a more comprehensive assessment of the overall benefits of coastal ecosystems.

A variety of methods are used to conduct economic valuation of coastal ecosystems. The market price method is used to value direct benefits based on prevailing market prices. The replacement cost method estimates the value of ecosystem functions by calculating the costs that would need to be incurred if those functions were replaced by artificial technologies. In addition, the contingent valuation method is used to assess people's willingness to pay to conserve or maintain the ecosystem, while benefit transfer uses results from previous studies to estimate economic values in different locations. Using multiple methods in a complementary way enables a more accurate and comprehensive valuation.¹⁰

Various empirical studies show that coastal ecosystems have significant economic value. Research in Padang City indicates that the total economic value of mangrove ecosystems reaches approximately IDR 7.16 billion, reflecting a real contribution to the local economy. Other studies in coastal areas also show that mangroves as coastal protectors have a very large economic value because they reduce

disaster impacts and environmental damage. Conversely, uncontrolled human activities can decrease the economic value of these ecosystems. Therefore, sustainable management is necessary to ensure that their benefits can continue to be felt in the long term.

Economic valuation of coastal ecosystems has important implications for public policy formulation. Information about economic value can be used as a basis for spatial planning in coastal areas, natural resource management, and the determination of conservation policies. Without economic valuation information, coastal ecosystems are often treated as having little importance, making them vulnerable to overexploitation. For this reason, economic valuation results can increase government and public awareness of the importance of preserving coastal ecosystems. Furthermore, this approach supports the concept of sustainable development, namely the wise use of natural resources without reducing the ability of future generations to meet their needs.¹¹

Recent research in Indonesia also confirms that the economic value of coastal ecosystems is highly location-specific, meaning each region requires its own assessment. For example, a study in the coastal area of Pekalongan City found that regulating services of mangrove ecosystems—especially their protective function for settlements and aquaculture ponds against flooding and standing-water threats—have very large economic loss values. Specifically, the estimated economic losses were around IDR 13.6 trillion for settlement areas and IDR 24 trillion for aquaculture pond fisheries if the ecosystem

¹⁰ Pungki Ari Wibowo and Fia Birtha Al Sabet, "2.+Pungki+(74-85)," *OECOMICUS Journal of Economics* 6, no. 2 (2022).

¹¹ Ida Soewarni Stelah Kharina Hairunnisa, Ardiyanto Maksimilianus Gai, "Valuasi Ekonomi Hutan Mangrove Provinsi Sulawesi Utara," *Jurnal Planoeearth* 3, no. 1 (2018): 17–22.

is damaged or loses its function. These figures demonstrate that the economic value of coastal ecosystems far exceeds the direct benefits that are often perceived by the general public and policymakers. Similarly, research conducted in Tanjung Limau Village, Kutai Kartanegara Regency, East Kalimantan, in 2024 found that the total economic value of the local mangrove ecosystem reached IDR 63.9 billion per year. In this case, indirect benefits dominated the overall share of economic value, reinforcing the idea that the ecological functions of coastal ecosystems are far more valuable than simply the fish catches that are visible.¹²

Valuation of coastal ecosystems increasingly incorporates the dimension of blue carbon, which is becoming more relevant in the context of global climate change mitigation. Mangrove ecosystems are now recognized as a critical component of blue carbon ecosystems. They play a significant role in absorbing carbon dioxide through photosynthesis and storing it in biomass and sediments, so their carbon storage value has become part of Payment for Ecosystem Services (PES) schemes in the form of carbon credits. A study by IPB University even states that mangrove ecosystems, as part of blue carbon ecosystems, have an economic value potential of more than USD 90,000 per hectare. This figure positions coastal ecosystems as a strategic economic asset not only for local communities, but also for national interests in international carbon

trading. Accordingly, economic valuation of coastal ecosystems is no longer merely a planning tool for conservation. It has evolved into an important instrument to support sustainable development financing based on the comprehensive preservation of coastal natural resources.¹³

3. The Carbon Market Mechanism And The Regulation Of Carbon Economic Value in Indonesia

As climate change becomes increasingly evident, many countries, including Indonesia, are prompted to implement policies that can reduce greenhouse gas emissions. One instrument being used is the carbon market (carbon market), a mechanism that enables businesses or organizations to buy and sell carbon credits as a form of emissions reduction. Through this mechanism, parties that successfully reduce or absorb emissions can gain economic benefits, while parties that generate high emissions can purchase carbon credits to fulfill their emissions reduction obligations. Indonesia has developed a carbon market system as part of its efforts to achieve emissions reduction targets and its commitment to sustainable development.¹⁴

A carbon credit is a certificate stating that a certain activity has successfully reduced or sequestered greenhouse gas emissions equivalent to one ton of carbon dioxide (CO₂e). These carbon credits can be traded with other parties that require compensation for the emissions they produce. In practice, carbon credits are often associated with carbon offsetting, which refers to efforts to

¹² Galih Hendro, Azhari Azhari, and West Bangka, "An Extended Approach of Weight Collective Influence An Extended Approach Weight Collective Influence Graph for Detection Influence Actor c n e u l f n i e v i t c e l l o c t h g i e w f o h c a o r p p a d e d n e t Graph for Detection Influence Actor a e c n e u Mustofa for Detection" 8, no. 1 (2022): 1–11.

¹³ Rudy Aryanto and M. Yuwana Mardjuka, "Valuasi Ekonomi Dengan Travel Cost Method Pada Obyek

Ekowisata Pesisir (Kasus Kawasan Ujung Genteng, Sukabumi)," *Jurnal Ilmiah Pariwisata* 10, no. 1 (2005): 58–76.

¹⁴ Susan Fatmawati, Wahyu Andriyadi, and Ahmad Sigit Febriyanto, "Dampak Mekanisme Perdagangan Karbon Di Pasar Modal Indonesia: Membuat Portofolio Optimal Model Markowitz," *EKOMA : Jurnal Ekonomi, Manajemen, Akuntansi* 5, no. 1 (2025): 770–84, <https://doi.org/10.56799/ekoma.v5i1.12351>.

compensate for carbon emissions through projects capable of absorbing or reducing emissions—such as reforestation, forest conservation, renewable energy, and environmentally friendly waste management. As a result, carbon offset projects are one of the main sources for generating carbon credits that can be traded in carbon markets.¹⁵

To ensure that the generated carbon credits have credibility and are recognized both nationally and internationally, validation and verification processes are required. Validation is an assessment process conducted on the project design before the project is implemented. The purpose is to ensure that the methods used comply with emissions calculation standards and have the potential to produce real emissions reductions. After the project is carried out, verification is conducted to determine whether the reported emissions reductions have truly occurred in accordance with the achieved results. Both processes are carried out by independent institutions that have obtained accreditation, so their outcomes are trusted by all parties involved in carbon trading.

The carbon market mechanism in Indonesia begins with registering emissions-reduction projects in the SRN PPI. After registration, the project undergoes a validation stage before implementation. Once the project is running and achieves emissions reductions, a verification process is conducted to confirm the amount of emissions successfully reduced. Based on the verification results, the government or an authorized institution may issue carbon credits, which are then recorded in the national registry. These carbon credits can be traded through a carbon exchange or other

government-recognized trading mechanisms. Through this mechanism, the carbon market not only functions as an environmental instrument but also serves as an economic tool that provides incentives for businesses to adopt more environmentally friendly practices.¹⁶

In Indonesia, regulations regarding the economic value of carbon are governed by Presidential Regulation No. 98 of 2021. This regulation explains that the economic value of carbon is the value assigned to each unit of greenhouse gas emissions that is successfully reduced or absorbed through various mechanisms, including carbon trading, performance-based payments, and carbon levies. This policy provides the legal foundation for implementing the national carbon market while offering legal certainty for businesses that wish to participate in green economic activities. In addition, the policy on carbon economic value is supported by Law No. 7 of 2021, which regulates carbon tax implementation as an emissions control instrument.

Applying carbon economic value provides various benefits for Indonesia. From an economic perspective, carbon markets can open new investment opportunities, increase the competitiveness of green industries, and create additional sources of income for communities and companies that successfully reduce emissions. From an environmental perspective, these policies encourage the reduction of greenhouse gas emissions and support Indonesia's Net Zero Emissions target. However, carbon market implementation still faces several challenges, such as relatively high validation and verification costs, limited capacity of oversight institutions, and the need to

¹⁵ Alfia Ayu Kusumaningrum, "Proceeding Legal Symposium" 2, no. 1 (2024): 90–102.

¹⁶ Daniel Fenetiruma and I Made Dedy Priyanto, "Pengaturan Hukum Dan Implementasi

Perdagangan Karbon Di Indonesia," *Jurnal Media Akademik (Jma)* 3, no. 3 (2025): 1–17, <https://jurnal.mediaakademik.com/index.php/jma/article/view/1653>.

improve public and business understanding of carbon trading mechanisms.

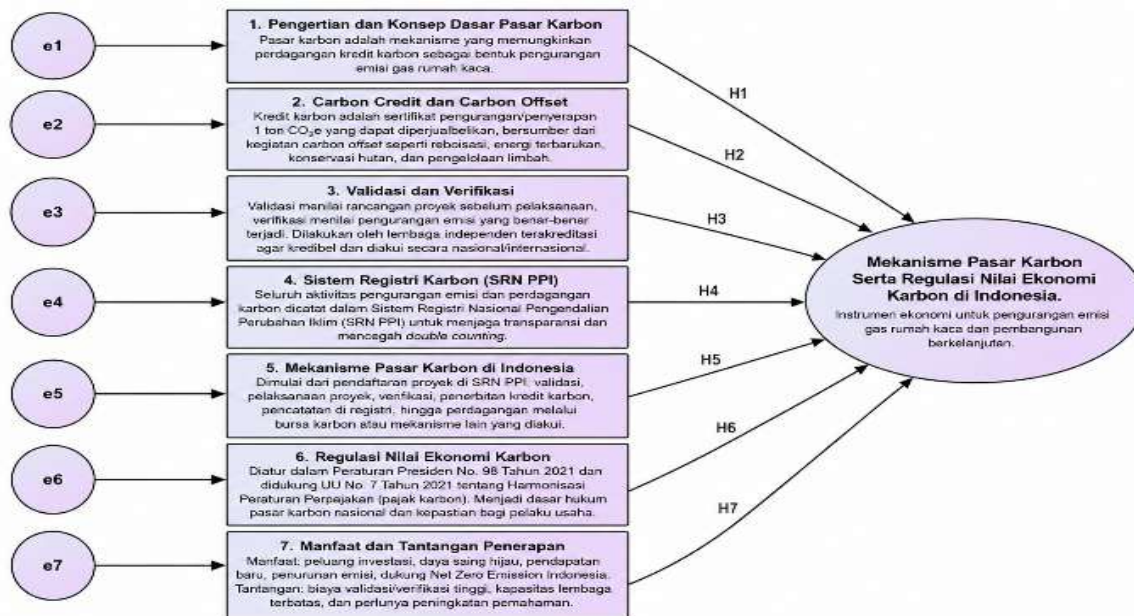


Figure 1. Conceptual Framework of the Carbon Market Mechanism and the Regulation of Carbon Economic Value in Indonesia

Based on the figure above, the carbon market mechanism and carbon economic value regulation in Indonesia are structured by seven main components: the definition and basic concepts of carbon markets, carbon credits and carbon offsets, validation and verification, the carbon registry system (SRN PPI), the carbon market mechanism in Indonesia, regulations on carbon economic value, and the benefits and challenges of implementing the system. These seven components support the implementation of the carbon market as an instrument for reducing greenhouse gas emissions.

The relationships illustrated through H1 to H7 indicate that each component is interconnected with the carbon market mechanism and the regulation of carbon economic value in Indonesia. Therefore, the success of carbon market implementation depends not only on the carbon trading system itself, but also on regulatory support, credible validation and verification

processes, a transparent registry system, and understanding of the benefits and challenges faced in implementing it.

4. Analysis of Sharia Economic Law on the Valuation of Coastal Ecosystems in the Carbon Market

The utilization of coastal ecosystems as economic assets is part of the effort to improve public welfare, particularly in coastal areas. Based on findings from various studies, coastal ecosystems possess significant potential to support economic activities such as fisheries, tourism, and environmental services. However, such utilization cannot be carried out freely without considering the principles of sustainability and justice. From the perspective of Sharia Economic Law, every economic activity must be aligned with Sharia values, which emphasize a balance

between economic benefits and environmental preservation.¹⁷

Within the framework of maqashid shari'ah, the utilization of coastal ecosystems should aim to achieve public welfare (maslahah) for society as a whole. Research on coastal communities indicates that welfare is measured not only by economic aspects but also by the protection of human life, the environment, and the sustainability of natural resources. This is consistent with the objectives of maqashid shari'ah, which seek not only to protect wealth (hifz al-mal) but also to preserve life and the environment. Therefore, the utilization of coastal areas as economic assets must be carried out while maintaining ecological balance so that their benefits can be enjoyed sustainably over the long term.¹⁸ This maqasid-based orientation is also relevant to Sharia economic legal reasoning because maqāsid al-syarī'ah functions as a normative consideration for ensuring justice, public welfare, and benefit in Islamic economic matters.¹⁹

Furthermore, the principle of justice ('adl) serves as a fundamental basis for the management of coastal resources. According to studies in Sharia economics, justice does not merely refer to the equitable distribution of economic benefits but also includes the protection of vulnerable groups, such as coastal communities. The utilization of coastal ecosystems should not create inequality or exploitation that harms local populations. Therefore, the distribution of economic benefits must be conducted fairly and proportionally. In Sharia Economic Law,

justice ('adl) means granting each party its rightful share in a proportional manner without causing harm. This principle is an essential component of the Islamic economic system, as it seeks to establish social balance and equitable prosperity. In the context of coastal ecosystem utilization, justice requires that natural resources should not be enjoyed exclusively by certain groups but should provide benefits to society as a whole, particularly coastal communities. Justice also includes the prohibition of excessive exploitation that may damage the environment or disadvantage future generations.²⁰

The concept of public welfare (maslahah) further emphasizes that every economic activity must generate tangible benefits and avoid causing harm. In this context, the utilization of coastal ecosystems must prioritize environmental sustainability as part of humanity's responsibility as stewards of the earth. Studies on marine-based economies from a Sharia perspective demonstrate that natural resource management should prevent environmental degradation (fasad) and prioritize long-term benefits. In the utilization of coastal ecosystems, this concept implies that the sea and coastal areas must not be controlled unilaterally by specific parties for private interests. The state has an essential role in regulating and managing these resources to ensure that they continue to benefit the wider community while maintaining environmental balance. This principle is also consistent with the objectives of maqashid

¹⁷ Perspektif Eko-syariah and Moh Mufid, "Fikih Mangrove : Formulasi Fikih Lingkungan Pesisir" 7, no. April 2017 (n.d.).

¹⁸ Muh. Zaini, vrita Putri Azzahroh, and Eny Widiaty, "Analisis Kesejahteraan Ekonomi Masyarakat Pesisir Dalam Perspektif Maqashid Syariah : Studi Kasus Pantai Gading , Mataram," *Peradaban Journal of Economic and Business* 4, no. 1 (2025): 55–70.

¹⁹ Warsidi, Sami Ullah Khan, and Suhartono, "Implementasi Maqāsid Al-Syarī'ah dalam Pertimbangan Hakim pada Sengketa Ekonomi Syariah," *Maqasid: Jurnal Studi Hukum Islam* 14, no. 3 (2025), <https://journal.um-surabaya.ac.id/Maqasid/article/view/28691>.

²⁰ Daindo Milla, "Potensi Pemanfaatan Ekosistem Pesisir Pantai Labuhan Haji Lombok Timur Sebagai Daerah Ekowisata."

shari'ah, which emphasize collective welfare and social justice.²¹

Moreover, under the concept of public ownership (milkiyah 'ammah), natural resources such as seas and coastal areas are regarded as collective assets that must be utilized for the benefit of the entire community (ummah). Consequently,

monopolization or exclusive control by particular parties that may harm the public interest is not permissible. The state plays a crucial role in regulating the utilization of these resources to ensure that it remains consistent with the principles of justice ('adl) and public welfare (maslahah).²²

Aspek Pembahasan	Analisis Hukum Ekonomi Syariah terhadap Valuasi Ekosistem Pesisir dalam Pasar Karbon		
	Indikator Prinsip Syariah	Dasar Hukum Syariah	Analisis / Pembahasan
Pemanfaatan Ekosistem Pesisir sebagai Aset Ekonomi	Keseimbangan (<i>muwazun</i>) antara keuntungan ekonomi dan kesehatan lingkungan; larangan merusak (<i>fisad</i>).	QS. Al-'Araf: 56 "...dan janganlah kamu berbuat kerusakan di muka bumi setelah (Allah) memperbaikinya."	Pemanfaatan ekosistem pesisir untuk pariwisata, perikanan, jasa lingkungan, dan pasar karbon harus selaras dengan nilai syariah. Aktivitas ekonomi tidak boleh merusak ekosistem pesisir dan harus menjaga keberlanjutan lingkungan agar manfaat ekonomi dapat dirasakan secara berkelanjutan.
Maqashid Syariah dan Kemashlahatan (Maslahah)	Kemashlahatan umum (<i>maslahah 'ammah</i>); menjaga harta (<i>hifz al-mal</i>), jiwa (<i>hifz al-nafs</i>), dan lingkungan.	QS. Al-Hasyr: 18 "Berthawab kepada Allah dan hendaklah setiap diri memperhatikan apa yang telah diperbuatnya untuk hari esok (akhirat)."	Valuasi ekosistem pesisir dalam pasar karbon harus mengarahkan pada kemashlahatan masyarakat luas, tidak hanya mengejar keuntungan finansial. Kegiatan ekonomi wajib memberikan manfaat nyata, tidak menimbulkan kerusakan, dan memastikan keberlanjutan sumber daya alam.
Prinsip Keadilan ('Adl)	Keadilan distributif; tidak menimbulkan ketimpangan; melindungi pihak lemah (masyarakat pesisir).	QS. An-Nah: 90 "Seungguhnya Allah menyukai (berlaku) adil, berbuat kebajikan, dan memberi kepada kerabat." Hadis: "La darar wa la dirar" (Tidak boleh membahayakan diri sendiri dan orang lain).	Distribusi manfaat dari pasar karbon harus adil dan proporsional bagi masyarakat pesisir. Tidak boleh terjadi eksploitasi atau monopoli yang merugikan masyarakat lokal. Keadilan mencakup pembagian fiskal, perlindungan kelompok lemah, serta larangan eksploitasi berlebihan yang merusak lingkungan dan merugikan generasi mendatang.
Kemashlahatan (Maslahah) dan Keberlanjutan Lingkungan	Menghindari kerusakan (<i>fisad</i>); menggunakan sumber jangka panjang (<i>sistikamah</i>); tanggung jawab ekologis.	QS. Al-Qashad: 77 "Dan carilah pada apa yang telah dianugerahkan Allah kepadamu (kebahagiaan) negeri akhirat, dan janganlah kamu melupakan bagianmu dari (kemakmuran) dunia..."	Valuasi ekosistem pesisir harus mendukung konservasi dan pemulihan ekosistem, bukan sebaliknya. Negara berperan aktif mengatur dan mengelola sumber daya agar manfaatnya untuk kesejahteraan bersama. Prinsip ini sejalan dengan tujuan maqashid syariah yang menekankan kesejahteraan bersama dan keadilan sosial.
Kepemilikan Umm (Milkiyah 'Ammah)	Sumber daya alam sebagai milik bersama; larangan monopoli (<i>ihkhar</i>); pengelolaan untuk kepentingan umum.	QS. Al-Hasyr: 7 "Apa saja harta rampasan (fai) yang diberikan Allah kepada Rasul-Nya, maka (harta itu) untuk Allah, Rasul, kerabat, anak yatim, orang miskin, dan orang yang dalam perjalanan..."	Laut dan wilayah pesisir adalah milik bersama yang tidak boleh dikuasai pihak tertentu untuk kepentingan pribadi. Negara wajib memastikan pemanfaatan ekosistem pesisir dalam pasar karbon sesuai prinsip keadilan dan kemashlahatan, sehingga manfaatnya dirasakan oleh seluruh masyarakat, khususnya masyarakat pesisir.

Table 1. Analysis of Sharia Economic Law on the Valuation of Coastal Ecosystems in the Carbon Market

Based on the table above, the presented data can be understood more clearly and systematically, making it easier for readers to interpret the information provided. The table enables readers to observe comparisons, trends, and relationships among the presented data, thereby serving as a foundation for further analysis and the formulation of conclusions that are consistent with the objectives of the discussion.

D. CONCLUSION

Utilizing coastal ecosystems as economic assets from the perspective of Islamic Economic Law is, in principle, a legitimate activity that holds significant potential to

improve public welfare—especially that of coastal communities. The findings of this study indicate that optimizing such utilization requires a balance among economic interests, social considerations, and environmental sustainability. In this regard, the role of the state is a strategic instrument to ensure just governance, prevent monopolistic practices, and guarantee a proportional and inclusive distribution of benefits across all segments of society.

This research still has methodological limitations because it relies primarily on a normative approach grounded in literature review, and therefore has not been able to comprehensively represent empirical

²¹ Jurnal Ilmiah, Akuntansi Manajemen, and Ekonomi Islam, "J A M – E K I S," n.d.

²² Umar Syahid, "Blue Sukuk : Inovasi Pembiayaan Syariah Untuk Konservasi Kelautan Berkelanjutan

Tinjauan Maqashid Syariah" 7, no. 1 (2025): 48–55.

realities in the field. In addition, the study has not deeply examined the implementational aspects—particularly regarding policy effectiveness, institutional dynamics, and potential conflicts of interest that often arise in the management of coastal resources. These limitations imply that the analysis of practical challenges in applying syari'ah principles in this context has not yet been optimal.

Further research is needed, particularly empirical studies using case-study

approaches, to obtain a more comprehensive and contextual understanding. Moreover, strengthening the regulatory framework and the government's monitoring mechanisms is urgent to ensure the sustainable and just governance of coastal resources. Furthermore, systematic efforts are required to improve the literacy and awareness of relevant stakeholders, as well as to encourage innovation in syari'ah-based financing instruments as part of a long-term sustainability-oriented resource management strategy.

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