



CHAPTER TWO

ANALYSING MARITIME ACTIVITIES AND CLIMATE CHANGE VUNERABILITY FROM JURISPRUDENCE OF ISLAMIC LAW

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Abstract

There are abundant natural resources on the sea are for human exploration for the benefits of humanity. However, during their explorations, certain hazards came to the fore which cause harm to humanity. This brings to the fore the recurrent debates on maritime activities and climate change vulnerability culminating into both international and national regimes for regulations and control. Despite these regimes, maritime activities continue to occasion climate change vulnerability. Against this backdrop, this study explores the discussions on the subject matter from the lens of Islamic jurisprudence. Hence, the study analyses the maritime activities and climate change vulnerability from the jurisprudence of Islamic law via reliance on the doctrinal method of data collection. The study finds that maritime activities which caused climate change vulnerability are forms of corruption on earth (fasad fil ard) which Allah frowns at. The study finds further that principles of Islamic law and maqasid Shari'ah forbid all forms avoidable harms caused via the maritime activities by human explorations of the sea. The study finds further that the current legal regimes for the control of maritime activities faces a number of challenges. The study recommends tackling the problems emanating from maritime activities through

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internalisation of the maqasid Shari'ah models of protections of life (nafs), wealth (mal) and future generations (nasl) amongst others.

Keywords: Legal Analysis, Maritime Activities, Climate Change, Vulnerability, Islamic Law

1.0 INTRODUCTION

Maritime activities have long occupied a central place in human civilization, facilitating trade, transportation, fisheries, and access to marine resources.¹ In the contemporary era, however, the scale and intensity of maritime operations particularly commercial shipping, offshore extraction, and industrial fishing have become significant contributors to climate change and marine environmental degradation.² Emissions from international shipping, marine pollution, and unsustainable exploitation of ocean resources exacerbate global warming, ocean acidification, biodiversity loss, and rising sea levels.³ These developments raise urgent legal and ethical questions regarding humanity's responsibility toward the marine environment.

Islamic law (Shariah) provides a doctrinally rich and morally grounded framework for addressing environmental harm,⁴ including that arising from maritime activities to the climate due to connection and reconnection of biodiversity species. The Qur'an repeatedly affirms the seas as a divine blessing subjected to human use, while simultaneously warning against excess and corruption. Allah states: "And it is He who has subjected the sea so that you may eat from its tender meat and extract from it ornaments which you wear"⁵ emphasizing lawful benefit from maritime resources. Yet this permission is conditioned by the overarching prohibition of environmental harm: "Do not cause corruption (*fasād*) on the earth after it has been set in order."⁶ Classical jurists understood *fasād* to include actions that disrupt natural balance and cause widespread harm, a concept directly relevant to climate-damaging maritime practices.⁷

¹ Q Abad and G Murtiza, 'Maritime and its Significance in National Economy' *PakistanSocialSciencesReview* (2019) 3(1) 689-698

² CB Alexander and EA Friday, 'Assessing the Role of Maritime Transport in West Africa's Climate Change Mitigation Strategies: A Comparative Review' *JournalofMaritimeScienceandResearch* (2024) 3(1) 1-9

³ *ibid*

⁴ Qur'an Chapter 16 verse 14

⁵ Qur'an Chapter 16 verse 14

⁶ Qur'an Chapter 7 verse 56

⁷ HA Hafidh, 'Fostering a Blue Economy through Islamic Environmental Ethocs (FiqhBi'ah): A Quranic Perspective' *ArabianJournalofBusinessandManagementReview (KuwaitChapter)* (2025) 14(1) 33-41

The doctrinal foundation of Islamic environmental responsibility is further anchored in the concept of *khilāfah* (stewardship), whereby humanity is appointed as Allah's trustee on Earth⁸ and *amānah* (trust), which imposes accountability for the use of natural resources. The Prophet Muhammad (peace be upon him) reinforced this ethic by declaring, "The world is green and pleasant, and Allah has appointed you as stewards over it."⁹ Moreover, the legal maxim *lāḍararawalāḍirār* (no harm shall be inflicted or reciprocated) establishes a binding principle prohibiting activities that cause environmental damage, including harm to marine ecosystems and climate systems.¹⁰ From a doctrinal perspective, maritime activities that contribute significantly to climate change conflict with the higher objectives of Islamic law (*maqāṣidal-sharī'ah*), particularly the preservation of life (*ḥifẓan-nafs*),¹¹ wealth (*ḥifẓal-māl*), and the environment as a collective public interest (*maṣlaḥah'āmmah*). Excessive emissions, marine pollution, and resource depletion undermine ecological balance (*mīzān*), which the Qur'an describes as a divinely ordained order that must not be transgressed.¹²

Notably, these Islamic legal principles closely align with contemporary international maritime and environmental law. The United Nations Convention on the Law of the Sea (UNCLOS) obliges states to protect and preserve the marine environment¹³ for ecological stability, while the International Maritime Organization (IMO) has adopted regulatory measures such as MARPOL and greenhouse gas reduction strategies aimed at mitigating shipping-related climate impacts. Both regimes emphasize the prevention of pollution, sustainable use of marine resources, and international cooperation—objectives that resonate from Islamic doctrines of harm prevention, moderation (*wasatiyyah*), and collective responsibility.¹⁴

Against the above backdrop, this paper analyses maritime activities and climate change vulnerability through the jurisprudence of Islamic legal lens, situating Shari'ah principles within the broader context of international maritime governance.

⁸ Qur'an Chapter 2 verse 30

⁹ Reported in Sahih Muslim

¹⁰ Hafidh, (n 7)

¹¹ Prophet Muhammad (PBUH), *Hadith, reported in Ibn Mājah, Sunan Ibn Mājah, Book of Jurisprudence (Kitab al-Ahkam)*.

¹² Qur'an Chapter 55 verses 7-9

¹³ Art 192, United Nations Convention on the Law of the Sea (UNCLOS)

¹⁴ Classical Exegesis (Tafsir) Al-Ṭabarī, Jāmi' al-Bayān'an Ta'wīlĀy al-Qur'ān (Dār al-Kutub al-Ilmiyyah, Beirut 2000).

2.0 CONCEPTUAL ANALYSIS OF MARITIME ACTIVITIES IN ISLAMIC LAW

Maritime activities refer to all human actions conducted in, on, or in relation to the seas and oceans, including navigation, maritime trade, fishing, transportation of goods and passengers, offshore resource exploitation, and the use of maritime routes for economic and strategic purposes.¹⁵ In Islamic law, the sea (*baḥr*) is regarded as a natural domain made accessible to humanity for lawful benefit, subject to ethical and legal constraints. Thus, the Qur'an explicitly recognizes the permissibility of maritime utilization, stating: "And it is He who subjected the sea for you, so that ships may sail upon it by His command and that you may seek of His bounty."¹⁶ This establishes the sea as a shared resource intended to facilitate economic activity and human welfare.

Islamic jurisprudence conceptualizes the sea as a common property (*mubāḥ* or *mashāʾ*) not subject to private ownership. Classical jurists held that seas, rivers, and open waters fall under public rights (*ḥuqūqʿāmmah*), accessible to all for navigation and sustenance. This doctrinal position is derived from the Prophetic statement: "People are partners in three: water, pasture, and fire."¹⁷ As a result, maritime activities are lawful in principle, but no individual or state may monopolize or exploit the sea in a manner that excludes others or causes harm.

Maritime navigation and trade are expressly permitted and encouraged in Islamic law as legitimate means of livelihood (*kasbḥalāl*). The Qur'an repeatedly refers to ships sailing through the seas as signs of divine mercy and facilitation of commerce.¹⁸ Juristically, maritime trade is governed by general principles of commercial law (*muʿāmalāt*), including contractual consent, transparency, risk-sharing, and prohibition of fraud (*gharar*) and injustice (*ẓulm*).¹⁹ Maritime transportation contracts, such as carriage of goods and passengers, fall under lawful service contracts (*ijārah*) and partnerships (*shirkah*) tracing its foundation to the passage of Nuh Arch.²⁰

¹⁵ VB Chapapria, 'New Trend in Maritime Transportation and Port Activity' *International Journal of Transport Development and Integration* (2017) 1(4) 624-632

¹⁶ Qur'an Chapter 45 verse 12

¹⁷ Reported in Sunan Abī Dāwūd

¹⁸ Qur'an Chapter 30 verse 46 and Qur'an Chapter 14 verse 32

¹⁹ I Candrawati and S Robbani, 'Understanding the & Key Prohibitions in Islamic Trade Practices' *Profit: Jurnal Kajian Ekonomidan Perbankan Syariah* (2025) 9(1) 44-

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²⁰ M Shalihah, *et al*, 'The Contribution of Islamic Financial Instruments to Maritime Development: Evaluation and Policy Recommendation for Maluku Regions'

Islamic law permits the exploitation of marine resources, particularly fishing and extraction of permissible substances, as long as such activities adhere to ethical and legal boundaries. The permissibility of consuming seafood is broadly established in the Qur'an: "Lawful to you is the game of the sea and its food."²¹ However, jurists emphasized that resource use must not lead to waste (*isrāf*), destruction, or long-term harm.²² Excessive exploitation that threatens marine life or ecological balance may be restricted under the doctrine of public interest (*maṣlaḥah*) and the prevention of harm (*saddad-dharā'ī*).²³

A central concept governing maritime activities in Islamic law is the prohibition of harm. The legal maxim *lāḍarara walāḍirār* establishes that no activity is permissible if it causes harm to others or to the environment. Marine pollution, unsafe navigation, and destructive practices are therefore inconsistent with Islamic legal ethics. The Qur'an condemns environmental corruption, stating: "Corruption has appeared on land and sea because of what people's hands have earned,"²⁴ explicitly linking human activity to marine degradation.

Islamic law frames maritime engagement within the broader concept of *khilāfah* (stewardship), which assigns humans responsibility for maintaining the balance (*mīzān*) of creation.²⁵ Maritime actors whether individuals, corporations, or states are accountable for their actions under the principle of *amānah* (trust). This accountability extends beyond immediate economic gain to include intergenerational responsibility and protection of collective rights.²⁶

Islamic governance recognizes the authority of the state (*walīal-amr*) to regulate maritime activities in order to protect public welfare. This includes enforcing safety standards, preventing pollution, regulating fishing practices, and managing maritime routes.²⁷ Such regulation is justified under *siyāsah shar'īyyah* (Shariah-oriented public policy), which allows adaptive legal measures to address new challenges while remaining consistent with foundational Islamic principles.²⁸

²¹ Qur'an Chapter 5 verse 96

²² TYSS Aldhuhoori and AB Abdullah, 'Environmental Ethics in Islamic Law and its Impact on the UAE'S National Strategies for Sustainable Development' *International Journal of Academic Research in Business & Social Sciences* (2025) 15(1) 456-466

²³ ibid

²⁴ Qur'an Chapter 30 verse 41

²⁵ Qur'an Chapter 55 verse 7-9

²⁶ J AL-Sumaiti, 'The Contribution of Islamic Law to the Maritime Law' (Ph.D. Thesis, University of Wales, Lampeter, 2004) 33-34

²⁷ AA Muhammed-Mikaeel and AA Zubair, 'Combating Corporation-Induced Environmental Pollution in Nigeria vide Shari'ah Mechanism' *International Journal of Law and Social Sciences* (2022) 8(1) 23

²⁸ Al-Sumaiti, (n 26)

Conceptually, Islamic law's treatment of maritime activities aligns with modern principles of maritime governance, including freedom of navigation, sustainable resource use, and environmental protection. While articulated through religious-legal terminology, Islamic law advances a coherent framework that balances economic utilization of the seas with ethical restraint and ecological responsibility. In conceptual terms, maritime activities in Islamic law are grounded in permissibility, shared access, and economic utility, but are constrained by ethical principles of stewardship, harm prevention, and public interest.²⁹ Islamic law does not oppose maritime development; rather, it conditions such development on justice, moderation, and accountability. This conceptual framework provides a robust foundation for addressing contemporary maritime challenges while preserving the integrity of the marine environment.

3.0 BRIEF HISTORICAL ACCOUNT OF MARITIME ACTIVITIES VIS-A-VIS ISLAMIC LAW

Maritime activities form a cornerstone of international trade, economic development, and human mobility. Approximately 80% of global trade by volume and over 70% by value is transported via the world's oceans and seas.³⁰ These activities include shipping, fishing, offshore energy production, and port operations, each carrying legal, economic, and environmental implications. However, the expansion and intensification of maritime activities have brought significant environmental challenges most notably, climate change.³¹

Climate change, driven by greenhouse gas emissions and global warming, has heightened the frequency and intensity of extreme weather events, accelerated sea-level rise, and altered marine ecosystems.³² These environmental shifts threaten coastal infrastructure, disrupt shipping routes, and jeopardize the sustainability of marine resources upon which millions of livelihoods depend. The maritime industry contributes to climate change through emissions from vessels, offshore installations, and port operations.³³

²⁹ Candrawati and Robbani, (n 19)

³⁰ N Srivastava, 'Development of Maritime Law' *International Journal of Law and Management & Humanities* (2018) 1(3) 1-5

³¹ *ibid*

³² TX Song, 'The Historical Development of International Law of the Sea' *International Journal for Empirical Education and Research* (2017) <https://journals.seagullpublications.com> accessed 3 April 2026.

³³ *ibid*

Furthermore, climate change alters maritime environments and increases legal complexities regarding liability, responsibility, and regulation.³⁴ In response to these challenges, international legal instruments such as the United Nations Convention on the Law of the Sea (UNCLOS) and regulations from the International Maritime Organization (IMO) have introduced frameworks and standards to mitigate environmental impact and adapt maritime law to ecological realities.³⁵ Even so, implementation gaps persist, especially in integrating ethical and religious norms into environmental governance.

In Muslim-majority jurisdictions and regions where Islamic law (*Shari'ah*) influences legal systems, there is a growing interest in how Islamic legal principles address environmental stewardship and climate change. Islamic law, derived from the Qur'an, Sunnah, consensus (*ijma'*), and analogical reasoning (*qiyas*), encompasses teachings that emphasize *khalīfah* (human stewardship of the Earth), *ḥimāyah* (protection of resources), and *lādarara* (the principle of no harm).³⁶ These principles potentially provide ethical and jurisprudential foundations for regulating maritime activities in the context of climate change.

Despite the rich ethical teachings in Islamic jurisprudence on environmental care, there is a paucity of scholarship that specifically interrogates how Islamic legal frameworks address the intersection of maritime governance and climate change. Most current regulatory analyses focus on secular international law or comparative legal frameworks, with limited attention to Islamic legal norms. This creates a critical gap for scholars, policymakers, and legal practitioners seeking context-specific, culturally relevant frameworks that align maritime practices with environmental sustainability in Islamic legal settings. This serves as the rationale for examining maritime activities and climate change through the lens of Islamic law is multifaceted and grounded in legal, environmental, socio-cultural, and policy considerations.

4.0 LEGAL AND ETHICAL ISSUES ON THE IMPACT OF MARITIME ACTIVITIES ON CLIMATE CHANGE

Maritime climate change refers to the impact of climate change on oceans and coastal environments, as well as the contribution of maritime activities such as shipping, offshore oil and gas extraction, deep-sea mining, and industrial fishing

³⁴ *ibid*

³⁵ *ibid*

³⁶ V Semsek, 'On Maritime Activities in the History of Islamic Civilization' *Journal of Civilization Studies* (2024) 9(1) 36-46

to global warming.³⁷ Rising sea levels, ocean acidification, coral bleaching, coastal erosion, and extreme weather events are no longer distant threats; they are unfolding realities that disproportionately affect coastal and island communities. Within Islamic law (*Sharī'ah*), these developments are not merely environmental or scientific concerns. They constitute profound legal and ethical questions. Islamic jurisprudence, grounded in the Qur'an, Sunnah, and juristic reasoning, provides a normative framework that addresses harm, justice, stewardship, public welfare, and accountability principles directly relevant to maritime climate change.³⁸ Thus, maritime climate change in Islamic law is both: A legal issue, involving liability, regulation, and governance. An ethical issue concerning moral responsibility before God and society.

The Sea as a Divine Trust (*Amānah*) Islamic theology views the natural world as a trust (*amānah*) granted to humanity: “Indeed, We offered the Trust to the heavens and the earth and the mountains, and they declined to bear it...³⁹ but man undertook it.” The sea, repeatedly described in the Qur'an as subjected for human benefit,⁴⁰ is not human property in an absolute sense. Rather, it is entrusted for responsible use. Climate change-induced degradation of marine ecosystems through excessive emissions, oil spills, and pollution constitutes a breach of this trust.

4.1 The Principle of No Harm (*LāḌarawaLāḌirār*)

This principle forms the backbone of Islamic tort law and public regulation. Maritime activities that emit greenhouse gases, contribute to ocean acidification, or damage marine biodiversity produce harm that extends beyond national borders.⁴¹ Climate change impacts include flooding of coastal Muslim communities, loss of fisheries and livelihoods, destruction of coral reefs, increased storm intensity affecting port cities. Under Islamic jurisprudence, harm must be prevented wherever possible, if harm occurs, compensation and rectification are required. Also, in Islamic law preventive measures are preferred over reactive ones.⁴² Thus, excessive maritime emissions and ecological damage

³⁷ ML Tombak, *et al*, 'Shipping Related Activities and their Environmental Impact – Lessons Learnt from the Estonian Case Study' *TransNav: the International Journal on Maritime Navigation and safety of Sea Transportation* (2023) 17(4) 973-980

³⁸ Al-Sumaiti, (n 26)

³⁹ Qur'an Chapter 33 verse 72

⁴⁰ Qur'an Chapter 16 verse 14

⁴¹ Y Yin, “A Comparative Study on Liability Issues Concerning Maritime Transportation of Dangerous Goods: International and Chinese Perspectives” (Doctoral Thesis, University of Central Lancashire, 2017) 1-286

⁴² S Alkaabi, 'The Role of Islamic Shariah to Protect Marine Environment with Efforts of International Law' (International Conference on Syariah & Law 2021)

may be viewed as violations of this maxim, creating legal grounds for regulatory intervention.

4.2 Prohibition of Corruption (*Fasād*) on Earth

The Qur'an warns that "Corruption has appeared on land and sea because of what people's hands have earned"⁴³ This verse is strikingly relevant to maritime climate change. The phrase "on land and sea" reflects a comprehensive environmental concern. Classical exegetes understood "*fasād*" (corruption) to include environmental degradation, injustice, and disruption of balance. This is line Modern manifestations of *fasād* at sea include marine pollution from ships. Carbon emissions from global fleets, destruction of marine habitats, overexploitation of fish stocks and so on are common examples of the modern-day corruption.

It is important to note that Islamic law seeks to prevent *fasād* and restore balance (*mīzān*). Climate change disrupts ecological balance, thereby triggering both moral condemnation and legal responsibility under *Sharī'ah* principles. In Islam public interest (*Maṣlaḥah*) and environmental protection are special doctrine treated in high esteem with absolute recognition of human rights. The doctrine of *maṣlaḥah* (public interest) allows Islamic law to adapt to emerging societal challenges.⁴⁴ Protection of the environment and climate stability aligns with the higher objectives of *Sharī'ah* (*Maqāṣidal-Sharī'ah*), particularly, protection of life (*ḥifẓan-nafs*), Protection of property (*ḥifẓal-māl*), protection of progeny (*ḥifẓan-nasl*), protection of intellect (*ḥifẓ al-'aql*), protection of religion (*ḥifẓ ad-dīn*).⁴⁵ Therefore, maritime climate change threatens life through extreme weather and displacement, property through flooding and erosion, and future generations through ecological collapse is worthy of publication and call for series of awareness strategies. Therefore, regulatory measures that will limit harmful maritime emissions can be justified as serving the *Maqāṣid*.

In this light, Islamic law supports, environmental regulations, emission reductions, sustainable fishing practices and other biodiversity is an important

⁴³ Qur'an Chapter 30 verse 41

⁴⁴ A Rahmawati and B Satrio, 'Re-Actualization of the Concept of Al-Maslahah Al-Mursalah in Sharia-Based Public Policy Formulation' *Samarinda International Journal of Islamic Studies* (2024) 1(2) 89-100

⁴⁵ TA Harahap, *et al*, 'Maqasid al-Shari'ah in Maritime Governance to Realize Sustainable Development in Indonesia' in MC Ansar, *et al*, (eds., *Proceedings of the World conference on Governance and Social Sciences 2025 (WCGSS 2025)*, Advances in Social Science, Education and Humanities Research 992 (2026) 163-177

topic to be dealt with and provides recommendations such as renewable maritime energy development to enhance intergenerational justice in Islamic ethics. Islamic law emphasizes responsibility toward future generations, wastefulness (*isrāf*)⁴⁶ is prohibited in Islam resources are to be used rightly and moderately because rights of others extend beyond immediate stakeholders. The Prophet Muḥammad (peace be upon him) discouraged excessive water use even at a flowing river.⁴⁷ This principle of restraint applies even more urgently to large-scale maritime industries to prevent intergenerational harm, violations of right to justice ('*adl*), trust (*amānah*), public welfare (*maṣlaḥah*) and protect the Islamic principle of *Ladorara* (Live and allow others to live). Thus, maritime climate change implicates ethical obligations not only to contemporaries but to unborn generations and a collective responsibility and governance. Islamic law recognizes collective duties (*fardkifāyah*) obligations that fall upon the community if not fulfilled by individuals.⁴⁸ Environmental protection, particularly at a systemic level like maritime governance, may fall within this category of Governments in Muslim-majority states bear responsibility to enforce environmental standards, regulate shipping emissions, protect marine biodiversity, participate in global climate agreements, failure to regulate harmful maritime activities may constitute negligence in governance under Islamic principles of accountability (*ḥisbah*).

4.3 Climate Justice and Vulnerable Communities

Maritime climate change disproportionately affects vulnerable coastal populations, many of whom reside in Muslim-majority countries. Islamic law places special emphasis on protecting the weak (*mustaḍ'afīn*).⁴⁹ Justice in Islamic law demands, fair distribution of environmental burdens, protection of livelihoods sorted out with compensation for damage and so on under the theory of *Ladara*. Climate injustice where industrial actors profit while coastal communities suffer this raises a serious legal concern for a moderate action and serious ethical and legal concerns within the *Sharī'ah* framework falls within ethical dimensions beyond legal compliance because Islamic law is not limited to enforceable rules; it integrates morality with legality.⁵⁰ Even where formal

⁴⁶ *ibid*

⁴⁷ SU Jadoon, 'Prophet (SAW) Strategy in Prevention of Water Pollution' *Journal of Xi'an Shiyu University, natural Science Edition* (2023) 19(06) 1-6

⁴⁸ A Zulfiqar, 'Collective Duties (fardkifaya) in Islamic Law: The Moral Community, State Authority and Ethical Speculation in the Premodern Period' (Doctoral Dissertation, University of Pennsylvania, 2018) 1-365

⁴⁹ I Saifnazarov, *et al*, 'The Interplay between Sharia Law, Religious Principles, and Social Justice in the Islamic Tradition' *Pharos Journal of Theology* (2025) 106(3) 1-10

regulation is absent, ethical responsibility remains with normal human rights standard in Islamic law. Maritime corporations and states are morally accountable before Allah (SWT) perhaps Islamic ethics encourages voluntary emission reduction, ethical investment in clean technologies, transparency in environmental reporting and Sustainable maritime innovation. The sea, as a sign of divine power, demands reverence not exploitation without restraint. Therefore, maritime climate change is not merely a technical or environmental problem in Islamic law, it is a legal issue grounded in liability, prevention of harm, public interest, governance, and an ethical issue rooted in stewardship, justice, and accountability before Allah (SWT).

From the Qur'anic warning against corruption "on land and sea" to the legal maxim of no harm, Islamic jurisprudence provides a comprehensive normative framework for addressing maritime climate challenges. The integration of these principles into modern maritime governance offers a pathway toward sustainability that is legally grounded, ethically rich, and spiritually conscious. In essence, Islamic law calls for a maritime order where economic activity does not undermine ecological balance and living sustainability where humanity fulfils its role as guardian not destroyer of the oceans.

5.0 CHALLENGES IN THE APPLICATION OF LAWS FOR THE PREVENTION OF DANGER OF MARITIME ACTIVITIES TO CLIMATE CHANGE

5.1 Balancing economic and ecological interests

Balancing economic and ecological interests in maritime activities is essential in addressing climate vulnerability challenges of the technical-know-how. Many maritime workers are ignorant of how their activities affect the ecological sustainability and other relevant life doings, particularly for coastal and island communities that depend heavily on the ocean for livelihoods. Maritime sectors such as shipping, fisheries, offshore energy, tourism, and port development contribute significantly to global trade and economic growth. However, these activities also generate greenhouse gas emissions, degrade marine ecosystems, and increase the vulnerability of coastal environments to climate change. Achieving a sustainable balance requires integrated governance, technological innovation, and ecosystem-based management.

First, sustainable maritime transport is crucial. International shipping accounts



for a notable share of global carbon emissions. Transitioning to low-carbon fuels such as green hydrogen, ammonia, and biofuels, improving vessel energy efficiency, and adopting slow steaming practices can reduce emissions without disrupting global trade. Economic incentives such as carbon pricing, green port fees, and subsidies for cleaner technologies can encourage industry compliance while maintaining competitiveness.

Second, sustainable fisheries management helps protect marine biodiversity and food security. Overfishing, habitat destruction, and illegal fishing weaken ecosystems that naturally buffer climate impacts. Implementing science-based catch limits, enforcing marine protected areas (MPAs), and promoting sustainable aquaculture can support long-term economic benefits while enhancing ecological resilience. Healthy fish stocks and coral reefs contribute to coastal protection and reduce climate vulnerability.

Third, coastal infrastructure and port development must incorporate climate adaptation strategies. Rising sea levels and extreme weather events threaten ports and coastal economies. Nature-based solutions such as restoring mangroves, wetlands, and coral reefs can provide cost-effective coastal protection while preserving biodiversity. These ecosystems act as carbon sinks and reduce storm surges, benefiting both the environment and local economies. Fourth, offshore energy development should balance expansion with environmental safeguards. While offshore oil and gas activities pose ecological risks, renewable offshore energy such as wind, tidal, and wave power offers cleaner alternatives. Strategic marine spatial planning can minimize conflicts between energy production, fisheries, and conservation areas, ensuring efficient use of ocean space.

Governance and international cooperation are essential to achieving this balance. The ocean is a shared resource, and fragmented regulation can undermine sustainability efforts. Strong enforcement of international agreements, stakeholder participation, and transparent monitoring systems can ensure accountability. Public-private partnerships can mobilize investment in green technologies and climate-resilient infrastructure.

Thus, balancing economic and ecological interests in maritime activities requires shifting from short-term exploitation to long-term sustainability. By integrating climate mitigation, ecosystem conservation, and economic innovation, maritime industries can reduce climate vulnerability while supporting global development. Sustainable ocean management is not a trade-off between

economy and ecology; rather, it is a pathway to securing both environmental resilience and economic prosperity for future generations.

5.2 Fragmentation and Implementation Challenges

Academic work notes legal fragmentation the multiplicity of treaties and institutions governing oceans and climate which complicates implementation and enforcement, especially for developing states. This has led to gaps between UNCLOS obligations and Sustainable Development Goals (e.g., SDG 14 on life below water).

5.3 International Tribunal for the Law of the Sea (ITLOS) – Advisory Opinion No. 31 (2024)

This is the first major international judicial opinion directly addressing climate change within the law of the sea context. It reflects a growing trend where international adjudicative bodies interpret established maritime law to confront modern environmental threats which does carry international weight but failed to be ratified and domesticated by many maritime states across the globe which if many traced to the divine book of Islam shall be embrace as Allah's commandment. Despite this worldly recognition of this convention Quranic injunction and sunnah governing these activities had been in existence before and during the lifetime of the prophet knowing by the Greatest Creator that human activities are usually interchangeable and interchangeably connected.

6.0 Conclusion and Recommendations

The *Maqāṣidal-Sharī'ah* provide a strong normative foundation for climate action. Addressing climate vulnerability is not merely an environmental issue but a religious, ethical, and legal responsibility. By safeguarding life, wealth, and future generations, climate protection efforts align closely with the higher objectives of Islamic law and promote holistic justice (*ʿadl*) and public interest (*maṣlaḥah*). Harm must be removed (*al-ḍararyuzāl*) and public interest must supersede over private gain and prevention takes precedence over cure purely stated under Islamic law.

Maritime activities, including shipping, offshore energy production, and unsustainable fisheries, are significant contributors to greenhouse gas emissions, marine pollution, and ecosystem degradation. These impacts not only accelerate climate change but also heighten the vulnerability of coastal communities, disrupt livelihoods, and threaten the long-term health of the oceans. Addressing these challenges requires a holistic approach that balances economic

development with ecological stewardship. Integrating technological innovations, stringent regulations, sustainable practices, and ethical frameworks such as the principles of *Maqāṣidal-Sharīah* emphasizing the preservation of life in Islam, meaning preservation of wealth and future generations that will guide effective marine governance (the entire globe). Ultimately, mitigating the climate impacts of maritime activities is not merely an environmental imperative; it is a moral, economic, and legal responsibility to safeguard both current and future generations based on the guide of Islamic law.

By way of recommendation, it is asserted that strengthening marine protection and climate governance requires compliance with *maqāṣidal-sharīah*. To this end, some stpof recommendations are suggested below.

A. Preservation of Life (Ḥifẓan-Nafs)

Implement stringent marine pollution controls: Enforce regulations to reduce oil spills, plastic waste, and chemical discharges that threaten coastal communities and marine biodiversity.

Develop climate-resilient coastal infrastructure: Construct Sea walls, mangrove buffers, and early warning systems to protect human life from storm surges, flooding, and sea-level rise.

Promote sustainable fisheries management: Prevent overfishing and illegal fishing to ensure food security and the health of marine ecosystems, safeguarding human survival.

B. Preservation of Wealth (Ḥifẓal-Māl)

Encourage sustainable blue economy practices: Invest in renewable maritime energy, eco-friendly shipping, and aquaculture that provide economic benefits while conserving marine resources.

Implement economic incentives for conservation: Use subsidies, tax breaks, or green financing to reward businesses and communities that adopt climate-smart and environmentally responsible practices. Protect livelihoods dependent on the sea: Support local fishing communities and coastal industries through training, insurance schemes, and diversification programs to reduce climate-related economic losses.

C. Protection of Future Generations (Ḥifẓan-Nasl)

Integrate intergenerational climate accountability: Adopt legal frameworks and policies that prevent environmental degradation and ensure sustainable resource use for future generations.



Strengthen environmental education and awareness: Promote ecological literacy and climate stewardship as moral and religious responsibilities, emphasizing the Qur'anic principle of *khilāfah* (stewardship). Enhance regional and international cooperation: Engage in transboundary marine governance and climate agreements to safeguard ocean ecosystems for the long-term benefit of humanity.

D. Cross-Cutting Measures

Institutionalize *Maqāṣid*-based environmental ethics: Embed the objectives of *Sharī'ah* into policymaking, regulatory frameworks, and corporate responsibility codes. Adopt ecosystem-based management approaches: Align legal, social, and economic strategies with ecological sustainability, ensuring that marine protection advances both human welfare and environmental justice (*maṣlaḥah*). Strengthen monitoring and enforcement mechanisms: Use technology, community-based surveillance, and legal sanctions to ensure compliance with marine and climate regulations. By grounding marine protection and climate governance in the principles of *Maqāṣidal-Sharī'ah* preserving life, wealth, and future generations states and communities can pursue an integrated approach that is ethically robust, legally defensible, and ecologically sustainable. This approach transforms environmental stewardship from a policy choice into a moral and religious obligation, ensuring long-term resilience against climate vulnerability.