



El-Usrah: Jurnal Hukum Keluarga
<https://jurnal.ar-raniry.ac.id/index.php/usrah/index>
ISSN: 2620 – 8075 || E-ISSN: 2620 – 8083
Vol. 8. No. 1. June 2025
DOI: 10.22373/65rf2m16

Sea Fence and Public Policy: Impact on the Welfare of Fishermen Families in Tangerang, Indonesia

Musleh Harry¹, Fakhrudin Fakhrudin¹, Ahmad Wahidi², Nur Jannani¹, Meisy Fajari¹

¹ Universitas Islam Negeri Maulana Malik Ibrahim, Malang

² Universitas Islam Negeri Syekh Wasil Kediri

Email: el.moehy77@syariah.uin-malang.ac.id

Abstract

Indonesia as an archipelagic country, possesses a vast geographical area and an extensive coastline. Its coastal areas hold abundant natural resource potential, such as tourism assets, fisheries, seaweed, and coral reefs, all of which offer economic value and contribute to the welfare of local communities. This study employed an empirical juridical method and analyzed the issues of sea fence and public policy on the welfare of fishermen families in Tangerang, Indonesia, through the lens of public policy theory. Data were collected by means of interviews, document analysis, and a review of laws and regulations. Findings reveal that a lack of environmental impact assessments, community involvement, and transparency have rendered the sea fence construction policy ineffective. Additionally, sea fences have a direct impact on the well-being of fishing families, including reduced incomes, health problems, restricted access to fishing areas, higher operating expenses, and detrimental effects on marine biodiversity and seawater quality. Hence, efforts must be made to address the issues surrounding sea fences to enhance the welfare of fishermen and their families. Government policies on sea fences should include increasing the capacity of fisherman's families through training and education, establishing supporting infrastructure, and boosting fishermen and local community organizations. Policy review, more dialogic communication, and the implementation of fairer and more sustainable fisheries welfare measures are among the recommendations.

Keywords: Sea Fence, Economic Welfare, Fishermen Families, Public Policy

Abstrak

Indonesia sebagai negara kepulauan, memiliki wilayah geografis yang luas dan garis pantai yang panjang. Wilayah pesisirnya menyimpan potensi sumber daya alam yang melimpah, seperti aset pariwisata, perikanan, rumput laut, dan terumbu karang, yang semuanya memiliki nilai ekonomi dan berkontribusi pada kesejahteraan masyarakat lokal. Studi ini menggunakan metode empiris yudisial dan menganalisis isu pagar laut dan kebijakan publik terkait kesejahteraan keluarga nelayan di Tangerang, Indonesia, melalui perspektif teori kebijakan publik. Data dikumpulkan melalui wawancara, analisis dokumen, dan tinjauan terhadap undang-undang dan peraturan. Temuan menunjukkan bahwa kurangnya penilaian dampak lingkungan, keterlibatan masyarakat, dan transparansi telah membuat kebijakan pembangunan pagar laut menjadi tidak efektif. Selain itu, pagar laut memiliki dampak langsung terhadap kesejahteraan keluarga nelayan, termasuk penurunan pendapatan, masalah kesehatan, pembatasan akses ke area penangkapan ikan, biaya operasional yang lebih tinggi, serta dampak negatif terhadap keanekaragaman hayati laut dan kualitas air laut. Oleh karena itu, upaya harus dilakukan untuk mengatasi masalah seputar pagar laut guna meningkatkan kesejahteraan nelayan dan keluarga mereka. Kebijakan pemerintah terkait pagar laut harus mencakup peningkatan kapasitas keluarga nelayan melalui pelatihan dan pendidikan, pembangunan infrastruktur pendukung, serta penguatan organisasi nelayan dan komunitas lokal. Rekomendasi lainnya meliputi tinjauan kebijakan, komunikasi yang lebih dialogis, dan implementasi langkah-langkah kesejahteraan perikanan yang lebih adil dan berkelanjutan.

Katakunci: *Pagar Laut, Kesejahteraan Ekonomi, Keluarga Nelayan, Kebijakan Publik*

Introduction

As an archipelagic nation, Indonesia possesses a vast geographical expanse stretching from Sabang to Merauke, making its coastal areas rich in natural resources. Indonesia's coastal regions provide enormous economic potential as a result of easy access to natural resources, ports, tourism, and trade activities, all of which contribute to community welfare. However, coastal development in Indonesia often remains uneven, resulting in huge disparities between developed and underdeveloped regions. Coastal development disparity refers to the substantial differences in development levels among various coastal areas.¹

The improvement of coastal community welfare is shaped by both internal and external factors. Internal barriers for fishermen often include limited education, restricted access to modern technology, and insufficient capital. In addition, several

¹ Rizky Ujianti, et al., "Toward Sustainable Coastal Management Based on the Implementation of Blue Economy," *KnE Social Sciences* 10, No. 9 (2025), p. 270-279. Grace Amanda Rammang, et al., "Disparitas Pembangunan Wilayah Pesisir (Studi Kasus Kabupaten Pangkajene dan Kepulauan)," *Geographia: Jurnal Pendidikan dan Penelitian Geografi* 4, No. 1 (2023), p. 63-74.

external hurdles, which comprise diminishing marine resources, intense competition, market disadvantages, a weak bargaining position against middlemen, poor fishing port infrastructure, and complex jurisdictional issues in autonomous regions, are the burdens that exacerbate the poverty on these communities.²

Supporting the growth of coastal communities that rely on the sea for their livelihoods is essential.³ Indonesia, with its vast coastline stretching over 81,000 kilometers, is incredibly rich in marine resources. Remarkably, it hosts 555 species of seaweed out of about 8,000 found worldwide which shows the immense potential for seaweed farming. The country's coastal regions are also abundant in other natural resources, e.g., fish, coral reefs, sea sand, and coastal tourism opportunities. Nevertheless, it needs an integrated approach to effectively utilize these resources, by considering environmental sustainability, human resource development, and socio-economic factors, all of which play a crucial role in enhancing the welfare of local communities.⁴

On the other hand, a lack of government involvement in preventing illegal fishing has allowed such practices to persist in fishing areas, which leads to fishermen being unable to maximize their catch and trapped in cycles of poverty. To address these problems, particularly the impact of illegal fishing, the government should introduce targeted programs aimed at enhancing economic empowerment within fishing communities. By providing chances for alternate livelihoods, such efforts would lessen fishermen's reliance on daily catches and provide income stability, especially during periods of low yields.⁵

Tangerang Regency in Banten is one of Indonesia's regions with great fisheries potential. With its extensive coastline, the region has plenty of marine resources such as fish, seaweed, and coral reefs. However, despite this abundance, the welfare of fishing families within the local community has been declining. A recent issue that has drawn attention is the construction of a 30.16-kilometer sea fence along the coast. Constructed from bamboo and lacking proper permits, the fence has raised public concern not only in relation to its legality, but also in its

²Dilla Hariyanti, et al., "Community Empowerment in the Management of Coastal Areas and Small Islands to Achieve the Welfare of Local Communities," *Jurnal Indonesia Sosial Teknologi* 5, No. 11 (2024), p. 5156-5166. Hamim Farhan and Aslich Maulana, "Pola Pembangunan Masyarakat Desa Miskin Pesisir Pantai Dalam Mempertahankan Kelangsungan Hidup," *Jurnal Tamaddun* 17, No. 1 (2017), p. 1.

³Nisrinah Nadhilah, "Organisasi Pemberdayaan Masyarakat Rumah Kupas sebagai Solusi Permasalahan Masyarakat Pesisir Karangantu," *Jurnal Pelayanan Masyarakat Efektif Eastasouth* 1, no. 02 (2022), p. 45-55.

⁴Afan Afan, et al., "Pengaruh budidaya rumput laut terhadap tingkat kesejahteraan ekonomi masyarakat Desa Wasalabose Kecamatan Kulisusu Kabupaten Buton Utara," *Jurnal Sosial Ekonomi Perikanan* 9, No. 3 (2024), p. 265-270. Eunike Irene Kumaseh, et al., "Kajian Sosial Ekonomi Terhadap Potensi Dan Pemanfaatan Sumber Daya Alam Laut Dan Pesisir Di Pulau Bebalang Kecamatan Manganitu Selatan Kabupaten Kepulauan Sangihe," *Jurnal Ilmiah Tindalung* 6, No. 2 (2020), p. 46-54.

⁵Wahyuddin Wahyuddin, et al., "The Role of Government in Illegal Fishing Prevention to Increase Fishermen's Economic Welfare in Aceh Province," *Jurnal Ilmiah Peuradeun* 7, No. 2 (2019).

environmental consequence and disruption to local fishermen's livelihood. Eli Susiyanti, Head of the Marine and Fisheries Department in Banten Province, confirmed that the project was carried out without approval from the relevant authorities, making it a clear violation of the law.⁶

The installation of the sea fence in the waters of Tangerang Regency has sparked considerable debate and resistance, particularly from local fishermen.⁷ Several key issues include a lack of transparency, poor coordination among government agencies, and a non-dialogical communication approach. Although the project was initially intended to protect marine ecosystems and coastal areas, the process behind its planning and implementation has exposed internal disagreements within the government. As a result, the local community has not been adequately informed, and the people, especially those whose livelihoods depend on the sea, have to bear the brunt of the negative consequences.

This situation highlights the critical shortcoming of public communication in Indonesia: the reliance on outdated, top-down decision-making. Public involvement and transparency the essential foundations of sound public policy—are often neglected. As a result, people not only lose trust in the government but also reject any policies perceived as harmful to their interests.⁸ Trust relies on at least a minimum level of transparency, and a lack of it breeds resistance. In the case of the sea fence, the government has failed to clearly communicate its goals, benefits, and potential impacts. To this day, the public, particularly local fishermen, continues to question whether the policy was truly designed for environmental protection or merely to serve certain interests.

The government has quoted that the sea fence was constructed in the interest of protecting coastal infrastructure and preventing erosion. In reality, however, it has encroached upon the daily lives of fishermen. Many fishermen have reported reduction in income, deteriorating health, and reduced access to education for their children. The fence hinders their access to traditional fishing grounds, leading them to travel further at greater cost, both financial and physical.⁹ It may also affect seawater quality and contribute to a decline in marine biodiversity.

The welfare of fishermen and their families is paramount to sustainable coastal communities. Unfortunately, the sea fence issue has the potential to undermine their well-being in multiple ways. A drop in income affects their ability to meet basic needs such as food, healthcare, and education. Health challenges can reduce productivity and limit their capacity to earn a living. At the same time, disruptions in access to education may prevent them from acquiring the necessary

⁶ <https://www.cnnindonesia.com/nasional/20250213140551-12-1197884/pagar-laut-tangerang-terbongkar-nelayan-minta-perketat-pengawasan>, "No Title," n.d.

⁷ Hari Eko Purwanto, "Miscommunication Behind the Tangerang Sea Fence Polemic," *Universitas Muhammadiyah Jakarta*, 2025.

⁸ Hari Eko Purwanto, Miscommunication Behind the Tangerang Sea Fence Polemic.

⁹ Agus Sjafari and Agus, "Kontroversi Di Balik Pagar Laut," *Kompasiana.Com*, 2025, https://www.kompasiana.com/agus/di-balik-kontroversi-pagar-laut?page=2&page_images=2.

skills and knowledge to improve their earning potential.

In light of this, this study aimed to analyze the impact of the sea fence on the welfare of fishermen families in Tangerang Regency and to propose solutions for this issue. The study hopes that the findings may offer valuable insights for the government and the public, which aid in the resolution of the sea fence issues and eventually improving the welfare of these families. The study utilized an empirical juridical method, with analysis guided by public policy theory.¹⁰ Data were gathered by means of interviews with fishermen, community leaders, and legislative members, along with document analysis of legal regulations, journal articles, books, and media reports. This study concerns mainly on the link between the presence of the sea fence and the sustainability of fishermen's welfare. By doing so, the study seeks to contribute to a deeper understanding of how infrastructure decisions intersect with agrarian and maritime policy in Indonesia, and to highlight the legal implications that arise in the context of public policy implementation.

The Issues of Sea Fence and Coastal Community Development

The development of coastal communities in shoreline areas faces significant challenges, especially in coastal nations like Indonesia. One of the primary challenges is the increasing risk of disasters caused by climate change, which is further exacerbated by globalization. Rising sea levels, coastal erosion, and the intensification of extreme weather events threaten vital infrastructure, residential areas, and coastal economic resilience. The construction of sea fences or sea walls serves not only as a technical solution for disaster mitigation but also as part of a broader defense strategy to confront asymmetrical threats emerging from global environmental changes. Without adequate protective infrastructure, the impacts of climate change may destabilize social and economic conditions, trigger forced migration, and escalate the potential for resource-based conflicts. Therefore, sea fence development should be viewed as an integral part of a broader national security policy that includes infrastructure preparedness, climate adaptation, and the strengthening of coastal community capacity.¹¹

The marine natural resources are among Indonesia's greatest assets, which not only aid the nation's economy but also its environment. In order to protect such resources in coastal communities, the promotion of blue economy and the recognition of marine customary rights (*hak ulayat laut*) can be initiated. The blue economy is a sustainable approach to utilizing marine resources, while *hak ulayat laut* is a term referring to the recognition of indigenous communities' rights to manage their marine territories in a traditional and sustainable manner. The connection between the blue economy, *hak ulayat laut*, and conservation of marine natural resources in Indonesia

¹⁰ Munir Fuady, *Metode Riset Hukum: Pendekatan, Teori dan Konsep*, Depok, Rajawali Press, 2018. Hermanu Iriawan, *Teori Kebijakan Publik*, Malang: Literasi Nusantara Abadi, 2024.

¹¹ Muhammad Ramdhan Ulayo, et al., "Keamanan Nasional dalam Perspektif Ancaman Asimetris dan Implikasi Globalisasi Terhadap Pembangunan Tanggul Laut di Pesisir Pantai Utara," *Aurelia: Jurnal Penelitian dan Pengabdian Masyarakat Indonesia* 4, No. 2 (2025), p. 2149-2156.

illustrates how integrating these approaches can be reasonable choices for Indonesia's marine resources sustainability.¹²

The construction of sea fences along the coast of Indonesia, however, has been an issue of debate from legal, environmental, and social perspectives. Such practices are typically carried out without undergoing environmental impact assessments or the permissions required for the utilization of marine space, contrary to the precaution, prevention, and sustainable development principles incorporated in Law No. 32 of 2009 and other coastal regulations. Further, these activities have a tendency to overlook the involvement of the public, i.e., a constitutional requirement and a main instrument in promoting ecological justice. The inequality in information access, the limited public consultations, and the criminalization of coastal communities exhibit the poor commitment of the government towards the values of equitable and sustainable environmental preservation.¹³

The construction of the sea fence has raised a number of legal, economic, social, and environmental concerns. The sea fence obstructs fishermen's access to traditional fishing grounds, which leads to lower catches, higher operational costs, and more frequent cases of damage to fishing vessels. From an environmental standpoint, the fence disrupts natural water flow and accelerates sedimentation, posing a serious threat to marine ecosystems and coastal biodiversity. From a legal standpoint, the sea fence presents a concern because it contravenes various national regulations and may also violate international maritime law as outlined in the United Nations Convention on the Law of the Sea (UNCLOS). Moreover, the project appears to benefit businesses more than the well-being of coastal communities, thus contradicting the principles of social justice and the public interest.¹⁴

Sustainable coastal area management is key to improving community welfare and ensuring the long-term sustainability of natural resources. Use of coastal land for fisheries, agriculture, tourism, and industry provides a significant contribution to the well-being of coastal communities. In Indonesia, the well-being of coastal communities is closely linked with the sustainability of coastal area utilization. For community well-being enhancement and coastal ecosystem sustainability, an integrated management involving the government, local community, and stakeholder sectors is needed. Successful sustainable development in the coastal zone depends on sound policies and strategies that manage natural resources sensibly, protect the environment, and build local capacities.

Indonesia's abundant natural resources reinforce the nation's identity as a

¹² Wiwin Yulianingsih, "Blue Economy dan Hak Ulayat Laut di Indonesia: Sinergi untuk Kelestarian Laut dan Kesejahteraan Masyarakat," *Jurnal Hukum Lex Generalis* 6, No. 3 (2025).

¹³ Setyo Amirullah, "Tinjauan Yuridis Terhadap Pembangunan Pagar Laut Dalam Perspektif Perlindungan Lingkungan Hidup dan Partisipasi Publik," *Al-Zayn: Jurnal Ilmu Sosial & Hukum* 3, No. 2 (2025), p. 731-743.

¹⁴ Selma Dwi Amalia, et al., "Problematisasi Hukum Pagar Laut yang Berdampak pada Mata Pencarian Nelayan di Tangerang, Banten," *Forschungsforum Law Journal* 2, No. 02 (2025), p. 192-207.

maritime country. However, despite this high visibility, the majority of the coastal communities have not experienced the trickle-down benefits of the country's big-scale development programs and remain impoverished. Hence, coastal communities need to be empowered to address this. This suggests implementing laws and state policies that truly consider local cultures and values. For the past three decades, marine and fisheries development has been sidelined in national economic strategies. A more central and inclusive approach is crucial to ensure these communities, vital to Indonesia's maritime identity, can thrive.¹⁵

Coastal communities in Indonesia are surrounded by abundant natural resources, and the government has issued public policies related to economic empowerment and coastal area management. However, in reality, the majority of the coastal villages are still impoverished and marginalized. This is primarily due to limited budgetary allocations, as well as lifestyle patterns in communities that lead to low-income levels. There has also been a lack of clear and effective government programs aimed at improving their economic circumstances. The natural resources along the coast have not been optimally and fully utilized by the communities, and facilities and infrastructure in the villages remain underdeveloped. Greater government intervention is therefore needed in both management and economic empowerment of the communities. One solution is to reform public policies related to coastal development so that they are more effective, responsive, and inclusive of local needs.¹⁶

Optimal and proportional utilization of marine resources can undoubtedly help coastal communities break free from the cycle of poverty. An ideal model for coastal area management is one that is community-based and built upon synergy and meaningful interaction between the government, the community, and local wisdom. Empowering coastal communities to develop their own models of coastal management is essential to promoting their independence. This approach is advantageous, as active participation of local communities can increase income, preserve the coastal environment, and provide greater autonomy to develop and manage marine resources in line with the communities' potential, characteristics, and socio-cultural values. The active involvement of coastal communities also offers hope for addressing poverty, ultimately leading to the realization of justice and prosperity for those living in coastal areas.¹⁷

It is also important to emphasize that in programs aimed at managing and empowering coastal communities for improved welfare, strategic steps and models

¹⁵ Pijar Hatinurani Merdeka, "Manajemen Peningkatan Kesejahteraan Masyarakat Pesisir Melalui Pemberdayaan Usaha Lokal Masyarakat: a Review," *Journal of Accounting Management Economics and Business* 1, No. 1 (2023), p. 1-9

¹⁶ Rukin Rukin, "Pembangunan Perekonomian Masyarakat Desa Pesisir Sebagai Upaya Peningkatan Kesejahteraan," *Jurnal Sosial Humaniora* 11, No. 1 (2020), p. 1.

¹⁷ Anak Agung Istri Ari Atu Dewi, "Model Pengelolaan Wilayah Pesisir Berbasis Masyarakat: Community Based Development," *Jurnal Penelitian Hukum De Jure* 18, No. 2 (2018), p. 163.

that are acceptable to the community are essential to avoid resistance. The appropriate model is community-based empowerment that aligns with local values and culture, ensuring synergy between the government and the people.

The Impact of the Sea Fence on the Welfare of Fishermen Families in Tangerang

Fishing is one of the occupations with high risk. However, protection for this profession often receives minimal attention from the government. Although efforts have been made to provide economic and social protection, both by the central and regional governments, the implementation has not been optimal. One major barrier is the legal culture of the community, where individuals are reluctant to register for government programs. In addition, the lack of outreach and education has contributed to the community's weak legal awareness regarding the importance of personal insurance while carrying out activities at sea.¹⁸

The placement of the sea fence in the waters of Tangerang Regency—originally employed to protect coastal facilities and ward off erosion—has a rather negative impact on the well-being of coastal fishing communities.¹⁹ Most fishermen in this area live along the coast and rely primarily on fishery as their main source of livelihood. Their earnings largely depend on a daily catch of fish in nearby waters. However, the construction of the sea fence has affected a number of aspects of their well-being, from a drastic decrease in income due to closure of access to fishing grounds, to deteriorating health as a result of declining economic conditions, to social conflicts that threaten stability in community life among fishermen within the area.²⁰

Nevertheless, the construction of the sea fence has generated other problems for local fishermen, one of the which is a loss of earnings. Since the sea fence blocks access to their usual fishing grounds, the fishermen are forced to search for alternative fishing locations farther away, which not only consumes more fuel but also requires additional time and energy.²¹

The presence of illegal sea fences has had a direct impact on around 3,888 fishermen in Tangerang and Bekasi Regencies. The fences have restricted the fishermen's access to traditional fishing grounds, forcing them to travel farther.²² Achmad, a fisherman in Tangerang, mentioned that the increased travel distance has cut their daily earnings by up to Rp 100,000 per person.²³ Assuming fishermen work 20 days a month, this equates to an estimated annual loss of Rp. 9.31 billion for the

¹⁸ Nurul Khasanah Dahlan, et al., "The Community Legal Awareness in Implementing Fishermen's Insurance Policies in Bulukumba Regency," *De Jure* 20, No. 2 (2020).

¹⁹ "Membentang 30 Km di Tangerang, Untuk Apa Pagar Laut?" n.d.

²⁰ "Ancaman Kerusakan Ekologis dan Kehidupan Masyarakat Lokal Akibat Pagar Laut Ilegal di Tangerang," n.d.

²¹ I Ketut Wija Negara, et al., "Kondisi Sosial Ekonomi Masyarakat Pesisir dan Strategi Pembangunan Potensi Perikanan Tangkap Di Kabupaten Buleleng, Provinsi Bali (Kondisi Sosial Ekonomi Masyarakat Pesisir dan Strategi Pembangunan Potensi Perikanan Tangkap di Kabupaten Buleleng)," *Jurnal Manusia dan Lingkungan* 27, no. 2 (2020), p. 88–92.

²² "Kerugian Ekonomi Karena Pagar Laut Misterius di Tangerang: Ekonomi Okezone," n.d.

²³ Interview with Ahmad, Fisherman in Tangerang, February 13, 2025.

affected communities.²⁴ The decline in income directly threatens the ability of fishing families to afford essential needs like food and healthcare, which indicates the severe economic consequences of the illegal sea fence.

Aside from the financial impact, the unlawful sea fence poses serious health hazards to fisherman. Fishermen are compelled to work longer hours at sea to reach the fishing grounds, resulting in great physical exhaustion and increased exposure to harsh weather and dangerous marine conditions.²⁵ This puts them at a higher risk of developing health issues such as muscle pain, chronic fatigue, and respiratory issues. According to Ismail, a fisherman in Tangerang, the increased work intensity and harsher working conditions have caused them to fall ill more frequently, which negatively affects their productivity and family well-being.²⁶

The installation of the sea fence along the coast of Tangerang has been detrimental not only to marine biodiversity, but also to the livelihoods of coastal communities who rely on the sea. The sea fence has disrupted marine habitats and caused a drastic drop in fish catches, the fishermen's primary source of income.²⁷ Fishermen who once had easy access to fishing grounds now face the challenge of traveling farther distances, which increases operational costs and reduces their already strained incomes.²⁸

Moreover, the construction of the sea fence has also had adverse social effects. Tensions have arisen between fishermen and the government, as well as with the companies involved in the project. These conflicts are driven by a lack of transparency and a lack of dialogical communication among the stakeholders.²⁹ In addition, public dissatisfaction with the policy has also intensified social tensions. Some fishermen have been compelled to abandon their traditional livelihoods and seek alternative sources of income to support their families.

Such situations not only undermine the economic stability of coastal communities, but also disrupt the social balance of Tangerang Regency. Riyono Caping, member of Commission IX of Tangerang House of Representatives (DPRD), acknowledged that the presence of the sea fence has seriously impacted the local population. Data from the Marine and Fisheries Department of Banten Province showed that a total of 3,888 fishermen and 502 fish pond workers have been directly affected by the sea fence, impacting the livelihoods of approximately 21,950 people.³⁰ Furthermore, the Indonesian Ombudsman estimates that the losses incurred

²⁴ "Dampak Buruk Pagar Laut: Merusak Ekosistem dan Ekonomi Nelayan | Indopolitika.Com," n.d.

²⁵ Rieke Nur Safitri, "Dampak Perubahan Iklim terhadap Masyarakat di Wilayah Pesisir," Januari 2019.

²⁶ Interview with Ismail, Fisherman in Tangerang, February 13, 2025.

²⁷ Yunandar Yunandar, "Budaya Laut dan Tradisi Nelayan di Indonesia," *Sabda: Jurnal Studi Budaya* 1, no. 1 (2017), p. 22.

²⁸ "Analisis Kasus Pagar Laut Tangerang dalam Perspektif Sosiologi PDF," n.d.

²⁹ "Kehidupan Masyarakat Pesisir Tangerang Terancam Pagar Laut," n.d.

³⁰ Interview with Riyono Caping, Member of Commission IX of Tangerang DPRD, on February 10, 2025.

by fishermen due to the construction of the sea fence between August 2024 and January 2025 have reached approximately Rp 24 billion.³¹ This figure is projected based on the restricted access fishermen now have to their traditional fishing grounds, further worsening the social and economic conditions of coastal communities in Tangerang Regency.

From the lens of the theory of effectiveness, a policy or program is deemed effective if it successfully achieves its intended objectives, accurately targets its beneficiaries, and delivers measurable benefits to relevant stakeholders.³² In this context, the sea fence in Tangerang Regency has exhibited limited effectiveness although it was initially built to mitigate coastal erosion and environmental damage. This is due to oversight of the social and economic consequences for local fishing communities. From an environmental protection point of view, the sea fence may offer benefits by minimizing erosion. However, if such infrastructure disrupts marine habitats or hinders fishermen's access to fishing grounds, the policy is deemed ineffective and requires reevaluation.

The sea fence has also had a severe impact on community welfare. Fishermen's incomes have plummeted as a result of limited access to fishing grounds, thereby affecting the economic stability of their families.³³ Social tensions have also risen, fueled by a lack of transparency and open communication among the government, corporations, and affected people. This illustrates the policy's limited effectiveness, as it clearly fails to find a balance between environmental protection and the well-being of coastal communities.³⁴ A thorough evaluation is thus necessary to ensure a fairer and wiser implementation moving forward.

From a community welfare perspective, the sea fence policy in Tangerang Regency has proven ineffective, directly causing a decline in fishermen's income, deteriorating health, and escalating social conflicts that worsen their already difficult situation. The livelihoods of coastal communities, which heavily depend on daily fish catches, have been increasingly threatened by restricted access to fishing grounds. Fishermen are now forced to travel longer distances and incur higher operational costs, e.g., fuel and additional equipment, in order to secure a decent catch.³⁵ This decline in income directly jeopardizes their ability to meet basic needs like food, healthcare, and social necessities. Consequently, some fishermen have had to find alternative work to support their families.³⁶ This situation clearly shows that the sea

³¹ "Ombudsman: Kerugian Nelayan Akibat Pagar Laut di Tangerang Capai Rp 24 Miliar, Tempo.Co," n.d.

³² Yosep Gede Sutmasa, "Memastikan Efektivitas Implementasi Kebijakan Publik," *Jurnal Ilmiah Cakrawarti* 4, no. 1 (2021), p. 25–36.

³³ Syahlan Mattiro, "Memahami Ruang Hidup Masyarakat Pesisir (Studi: Masyarakat Pesisir di Desa Tabanio, Takisung Kec. Tanah Laut Kab. Tanah Laut-Kalimantan Selatan)," *Laporan Penelitian Universitas Lambung Mangkurat*, 2018, p. 1-32.

³⁴ Soerjono Soekanto, "Efektivitas Hukum dan Peran Sanksi," 1988.

³⁵ "Misteri Pagar Laut dan Nasib Nelayan," n.d.

³⁶ Sahlan Mattiro, "Memahami Ruang Hidup Masyarakat Pesisir (Studi: Masyarakat Pesisir di Desa Tabanio, Takisung Kec. Tanah Laut Kab. Tanah Laut-Kalimantan Selatan)."

fence's environmental protection efforts have not effectively balanced the interests and well-being of the fishing community.

The government needs to evaluate the sea fence development policy by taking into account the welfare of the affected communities. Environmental protection is important; however, it must not overlook the negative impacts experienced by local populations. Conservation efforts that are not accompanied by inclusive policies will only lead to prolonged social conflict and threaten the social and economic stability of coastal regions.

Therefore, it is essential to establish policies that accommodate the interests of all stakeholders through improved communication, transparency in the planning and implementation processes, and fair solutions for those affected. In addition, the government should implement support and empowerment programs for fishermen to help them cope with the challenges resulting from the sea fence construction. In doing so, the welfare of coastal communities can be preserved without compromising the environmental protection efforts currently being pursued.

Sea Fence and the Welfare of Fishermen's Families in Tangerang: A Public Policy Perspective

Although originally intended to protect coastal areas from erosion and natural disasters, the sea fence in Tangerang has had wide-ranging impacts on the local fishing community especially in economic, social, and environmental terms. Fishermen, as the most directly affected group, have faced multiple challenges, including restricted access to fishing grounds, increased operational costs, and a decline in their families' overall well-being.³⁷ In this context, it is critical to investigate the root causes that have made the sea fence a subject of concern and seek proper options for resolution.³⁸ Many fisherman are experiencing economic difficulties, which has a direct influence on their families' well-being. According to Abdul Reza, a staff member at the local village office, fishermen routinely voice concerns about their deteriorating financial condition, with some even fearing that their children may be unable to finish their education owing to income loss.³⁹

In addition to harming marine ecosystems, the construction of the sea fence has significantly altered the marine environment. The structure has altered ocean currents, which affect fish migration patterns and contribute to a decrease in fish populations in nearby fishing locations. This policy, therefore, needs to conform to

³⁷ "Peneliti BRIN Sorot Polemik Pagar Laut di Kabupaten Tangerang Pesisir Banten," BRIN - Peneliti BRIN Sorot Polemik Pagar Laut di Pesisir Tangerang Kabupaten Banten, Retrieved Maret 18, 2025 from <https://brin.go.id/news/122191/peneliti-brin-soroti-polemik-pemagaran-laut-di-pesisir-kabupaten-tangerang-banten>.

³⁸ Kurniawan Imbang, "Pengembangan Masyarakat Nelayan Dalam Meningkatkan Pendapatan. (Studi di Pelabuhan Kuala Stabas, Kecamatan Pesisir Tengah, Kabupaten Pesisir Barat)," 2023, <http://digilib.unila.ac.id/75129/>.

³⁹ Interview with Abdul Reza, Village Office Staff in Tangerang, February 13, 2025.

Article 33 of Law No. 32 of 2009 on Environmental Protection and Management, which specifies that any development project must assess its impact on ecosystem balance.⁴⁰ Sanusi, a local community leader, also noted that many residents have been forced to seek additional sources of income to support their families, as the local economy has suffered since the sea fence was constructed.⁴¹

Furthermore, Article 14 of Law No. 27 of 2007 on the Management of Coastal Areas and Small Islands states that any development activity in coastal zones must take into account the preservation of natural resources. Sea fences that disrupt current patterns and cause excessive sedimentation can damage fish habitats, ultimately harming fishermen who depend on these waters for their primary source of income.⁴²

The social and economic impacts are deeply felt by local community members, including leaders like Mrs. Sri. The sharp decline in fishermen's income has had widespread consequences on family welfare. Many fishing families now struggle to meet even their most basic needs, e.g., food, healthcare, and children's education. Sri Astuti, the wife of a fisherman, expressed her frustration, describing how difficult daily life has become. At times, her husband's earnings were not enough to cover even the cost of meals, leaving them with no choice but to borrow money just to get by.⁴³ This situation contradicts Article 28H, paragraph (1) of the 1945 Constitution of the Republic of Indonesia, which guarantees every citizen the right to physical and mental well-being, adequate housing, and a good and healthy environment. When policies restrict access to marine resources without addressing the social welfare of coastal communities, these constitutional rights become increasingly difficult to fulfill, especially for small-scale fishermen.⁴⁴

The social impact of the sea fence has also created economic inequality among coastal communities. Small-scale fishermen who lack the capital to sail farther in search of fish are forced to seek alternative jobs; opportunities that are not always easy to find. This situation has led to rising poverty and unemployment among fishermen.⁴⁵

The sea fence project has also suffered from a lack of community participation. Many fishermen feel excluded from the planning and decision-making processes related to its construction. The government's minimal outreach has fueled dissatisfaction and heightened public resistance to the project. Yet, Article 26 of Law No. 32/2009 on Environmental Protection and Management clearly states that communities have the right to participate in environmental decision-making. The

⁴⁰ Arif Satria, *Marine and Fisheries Politics* (Yayasan Pustaka Obor Indonesia, 2015).

⁴¹ Interview with Sanusi, Head of Environment in Tangerang, February 13, 2025.

⁴² Hasan Basri, "Pengelolaan, Pengawasan Wilayah Pesisir dan Laut di Indonesia," *Reusam: Jurnal Ilmu Hukum* 8, no. 2 (2020), p. 1–27.

⁴³ Interview with Sri Astuti, Fisherman's Wife and Housewife, February 9, 2025.

⁴⁴ Ilham Mirzaya Putra et al., "Analisis Sosial Ekonomi dan Budaya Masyarakat Pesisir Desa Nelayan Sebrang," *Ijtima'iyya: Jurnal Pengembangan Masyarakat Islam* 15, no. 1 (2022), p. 15–34.

⁴⁵ "Dampak Sosial, Ekonomi dan Lingkungan Pagar Laut dan Solusi dalam Perspektif Ekonomi Syariah - PINBUK News," Retrieved Januari 29, 2025 from <https://berita.pinbuk.id/?p=1088>.

limited involvement of local people in the sea fence project reflects a weakness in the implementation of public participation principles in environmental policymaking.

The lack of community participation exposes a larger issue, i.e., a lack of transparency in how the project was planned. If fisherman had been given the opportunity to engage in discussion and express their concerns from the beginning, the subsequent policies would have been more accommodating to their socioeconomic realities. Thus, prospective coastal initiatives must embrace democratic principles by actively incorporating communities in all stages of decision-making.

The construction of the sea fence in Tangerang has been ongoing for several years, yet its negative impacts have become increasingly evident in recent times. According to Article 26 of Law No. 32/2009 on Environmental Protection and Management, any project that affects the environment must involve public participation. Still, in the instance of the sea fence development, many fishermen argued that they were not properly informed before the project began.⁴⁶

Further, due to inconsistencies in development planning, the sea fence was initially designed solely to safeguard coastal infrastructure, with no consideration for the social and economic implications on fisherman. Article 65, paragraph (1) of Law No. 32/2009 states that every person has the right to a good and healthy environment. However, this policy has instead restricted fishermen's access to natural resources that serve as their primary livelihood.⁴⁷

The lack of Environmental and Social Impact Assessments is also one of the key factors behind the problems caused by the sea fence. This construction shall, in fact, comply with the Environmental Impact Assessment (AMDAL) requirements specified in Article 22 of Law No. 32 of 2009. Yet, due to a lack of comprehensive analysis and oversight, the initiative failed to tackle the long-term impact on the environment and fishermen's livelihoods.⁴⁸ In light of these issues, it is essential for the government to re-evaluate the sea fence development policy in order to strike a balance between environmental protection and the economic sustainability of fishing communities.

To mitigate the negative impact of the sea fence on the welfare of fishermen's families, comprehensive solutions must be taken by both the community and the government. Fishermen can play an active role in voicing their concerns by forming advocacy associations and rallying civil society organizations to demand policies that are more responsive to their needs. Diversification of livelihoods is also one solution: creating alternative sources of income such as fish farming, aquaculture, or marine tourism may replace reliance on open-sea fishing. Mulyono, a representative

⁴⁶ "Expert Calculates Sea Fences in Tangerang and Bekasi Harm the State and Fishermen Rp116 Billion a Year, These Are the Details | Tempo.Co," Retrieved March 18, 2025 from <https://www.tempo.co/ekonomi/pakar-hitung-pagar-laut-di-tangerang-dan-bekasi-rugikan-negara-dan-nelayan-rp116-miliar-setahun-ini-rinciannya-1194834>.

⁴⁷ Andre Notohamijoyo, *Reaktualisasikan Poros Maritim*, Jakarta: Mekar Cipta Lestari, 2023.

⁴⁸ Andre Notohamijoyo, *Reaktualisasikan Poros Maritim*.

appointed by the local fishermen, explained that they were willing to unite and demand justice from the government in pursuit of their well-being.⁴⁹

In the long term, guiding and educating fishermen on sustainable marine resource management and the use of more efficient fishing technologies will help improve their welfare. On the other hand, the government plays a crucial role in ensuring that sea fence development policies do not harm fishing communities. Policy evaluation and revision must be carried out with reference to Article 35 of Law No. 27/2007 on the Management of Coastal Areas and Small Islands, which regulates the protection of coastal communities' rights.

In addition, the government can provide fuel subsidies, environmentally friendly fishing gear, and business capital assistance to affected fishermen, so they can continue their livelihoods. Increasing public participation in policy-making is also a critical aspect, as mandated by Article 60 of Law No. 7/2016 on the Protection and Empowerment of Fishermen.

In addition, stricter environmental protections must be enforced to ensure that all coastal infrastructure development projects meet environmental impact assessment (EIA) requirements and do not cause harmful environmental consequences for surrounding communities. Ahmad, a local fisherman, also emphasized that communities must be involved in every stage of the decision-making process.⁵⁰ With the implementation of appropriate solutions and strong synergy between fishing communities and the government, it is hoped that the welfare of fishermen's families can improve and the negative impacts of sea fence construction can be minimized, without compromising the original objectives of the project.

The sea fence cases in Tangerang and Bekasi have sparked controversy due to their impact on shipping routes, the environment, and the rights of coastal communities, along with alleged legal violations, e.g., land deed forgery and illegal reclamation. The sea fence issue involves multidimensional violations, e.g., document forgery, environmental pollution, and corruption, which require criminal prosecution beyond administrative sanctions. The government's control over coastal areas must be optimized to prevent the privatization of the sea (as stated in Constitutional Court Decision No. 3/PUU-VIII/2010). Therefore, there is an urgent need to strengthen coastal policy, enhance inter-agency coordination, and conduct comparative studies with other countries to ensure fair and sustainable law enforcement.⁵¹

Therefore, in the context of public policy, the government, as the most competent and authorized party in regulating such policies, must genuinely prioritize the interests of the people to ensure their welfare and economic improvement. Legal justice must also be accessible to coastal communities so that the wealth and natural resources of the nation can be enjoyed by fishing families, most of whom are from

⁴⁹ Interview with Mulyono, Fishermen's Representative in Tangerang, February 13, 2025.

⁵⁰ Interview with Ahmad, Fisherman in Tangerang, February 13, 2025.

⁵¹ Nimrot Asi Banjar Nahor, "Analisa Hukum Mengenai Dugaan Tindak Pidana Pagar Laut Ditinjau Dari Paradigma Keadilan," *Jurnal Pendidikan Indonesia* 6, No. 5 (2025), p. 2620-2627.

lower-middle or even poor economic backgrounds. As a result, negative impacts such as declining income, coastal environmental degradation, and health issues can be eliminated. Hence, the role of the government is not only present but also truly aligned with the needs and rights of the people.

Conclusion

The sea fence issue heavily impacts the welfare of fishing families in Tangerang Regency. The sea fence directly affects their well-being, which leads to a decline in income and health. There are a number of underlying factors behind such circumstances, including reduced access to fishing grounds, increased operational costs for fishermen, and adverse effects on seawater quality and marine biodiversity. Thus, action must be taken to respond to the sea fence problem and contribute to the welfare of fishermen families in Tangerang. The actions can be carried out through re-examining government policy on the construction of sea fences, developing fishermen capacity through training and education, building supporting infrastructure, and strengthening local fishing institutions and community organizations. It is hoped that the implementation of these measures can help resolve the sea fence issue and sustain the welfare of fishermen communities in Tangerang Regency.

References

Journals and Books

- Afan Afan, et al., "Pengaruh budidaya rumput laut terhadap tingkat kesejahteraan ekonomi masyarakat Desa Wasalabose Kecamatan Kulisusu Kabupaten Buton Utara," *Jurnal Sosial Ekonomi Perikanan* 9, No. 3 (2024). DOI:10.33772/jsep.v9i3.53.
- Amalia, Selma Dwi, et al., "Problematisasi Hukum Pagar Laut yang Berdampak pada Mata Pencarian Nelayan di Tangerang, Banten," *Forschungsforum Law Journal* 2, No. 02 (2025). DOI:10.35586/flj.v2i02.10822
- Amirullah, Setyo, "Tinjauan Yuridis Terhadap Pembangunan Pagar Laut Dalam Perspektif Perlindungan Lingkungan Hidup dan Partisipasi Publik," *Al-Zayn: Jurnal Ilmu Sosial & Hukum* 3, No. 2 (2025). DOI:10.61104/alz.v3i2.1140.
- Basri, Hasan, "Pengelolaan, Pengawasan Wilayah Pesisir dan Laut di Indonesia," *Reusam: Jurnal Ilmu Hukum* 8, no. 2 (2020).
- Dahlan, Nurul Khasanah, et al., "The Community Legal Awareness in Implementing Fishermen's Insurance Policies in Bulukumba Regency," *De Jure* 20, No. 2 (2020). DOI: <https://doi.org/10.18860/j-fsh.v12i2.10072>.
- Dewi, Anak Agung Istri Ari Atu, "Model Pengelolaan Wilayah Pesisir Berbasis Masyarakat: Community Based Development," *Jurnal Penelitian Hukum De Jure* 18, No. 2 (2018). DOI:10.30641/dejure.2018.V18..
- Farhan, Hamim and Aslich Maulana, "Pola Pembangunan Masyarakat Desa Miskin Pesisir Pantai Dalam Mempertahankan Kelangsungan Hidup," *Jurnal*

- Tamaddun* 17, No. 1 (2017). DOI:10.30587/tamaddun.v0i0.72
- Fuady, Munir, *Metode Riset Hukum: Pendekatan, Teori dan Konsep*, Depok, Rajawali Press, 2018.
- Hariyanti, Dilla, et al., "Community Empowerment in the Management of Coastal Areas and Small Islands to Achieve the Welfare of Local Communities," *Jurnal Indonesia Sosial Teknologi* 5, No. 11 (2024). DOI:10.59141/jist.v5i11.7028.
- Iriawan, Hermanu, *Teori Kebijakan Publik*, Malang: Literasi Nusantara Abadi, 2024.
- Kumaseh, Eunike Irene, et al., "Kajian Sosial Ekonomi Terhadap Potensi Dan Pemanfaatan Sumber Daya Alam Laut Dan Pesisir Di Pulau Bebalang Kecamatan Manganitu Selatan Kabupaten Kepulauan Sangihe," *Jurnal Ilmiah Tindalung* 6, No. 2 (2020). DOI:10.54484/jit.v6i2.378.
- Mattiro, Syahlan. "Memahami Ruang Hidup Masyarakat Pesisir (Studi: Masyarakat Pesisir di Desa Tabanio, Takisung Kec. Tanah Laut Kab. Tanah Laut-Kalimantan Selatan)," *Laporan Penelitian Universitas Lambung Mangkurat*, 2018.
- Merdeka, Pijar Hatinurani, "Manajemen Peningkatan Kesejahteraan Masyarakat Pesisir Melalui Pemberdayaan Usaha Lokal Masyarakat: a Review," *Journal of Accounting Management Economics and Business* 1, No. 1 (2023). DOI:10.56855/analysis.v1i1.180.
- Nadhilah, Nisrinah. "Organisasi Pemberdayaan Masyarakat Rumah Kupas sebagai Solusi Permasalahan Masyarakat Pesisir Karangantu." *Jurnal Eastasouth Layanan Masyarakat Efektif* 1, no. 02 (2022). <https://doi.org/10.58812/ejecs.v1i02.44>.
- Nahor, Nimrot Asi Banjar, "Analisa Hukum Mengenai Dugaan Tindak Pidana Pagar Laut Ditinjau Dari Paradigma Keadilan," *Jurnal Pendidikan Indonesia* 6, No. 5 (2025). DOI:10.59141/japendi.v6i5.7852.
- Negara, I Ketut Wijaya, et al., "Kondisi Sosial Ekonomi Masyarakat Pesisir dan Strategi Pembangunan Potensi Perikanan Tangkap di Kabupaten Buleleng." *Jurnal Manusia dan Lingkungan* 27, no. 2 (2020). <https://doi.org/10.22146/JML.56523>.
- Notohamijoyo, Andre, *Reaktualisasikan Poros Maritim*, Jakarta: Mekar Cipta Lestari, 2023.
- Putra, Ilham Mirzaya, et al., "Analisis Sosial Ekonomi dan Budaya Masyarakat Pesisir Desa Nelayan Sebrang," *Ijtimaiyya: Jurnal Pengembangan Masyarakat Islam* 15, no. 1 (2022).
- Rammang, Grace Amanda, et al., "Disparitas Pembangunan Wilayah Pesisir (Studi Kasus Kabupaten Pangkajene dan Kepulauan)," *Geographia: Jurnal Pendidikan dan Penelitian Geografi* 4, No. 1 (2023). DOI:10.53682/gjppg.v4i1.7042.
- Rukin Rukin, "Pembangunan Perekonomian Masyarakat Desa Pesisir Sebagai Upaya Peningkatan Kesejahteraan," *Jurnal Sosial Humaniora* 11, No. 1 (2020). DOI:10.30997/jsh.v11i1.1998

- Soekanto, Soerjono, "Efektivitas Hukum dan Peran Sanksi," 1988.
- Sutmasa, Yosep Gede, "Memastikan Efektivitas Implementasi Kebijakan Publik," *Jurnal Ilmiah Cakrawarti* 4, no. 1 (2021).
- Sutmasa, Yosep Gede. "Memastikan Efektivitas Implementasi Kebijakan Publik." *Jurnal Ilmiah Cakrawarti* 4, no. 1 (2021). <https://doi.org/10.47532/JIC.V4I1.242>.
- Ujianti, Rizky, et al., "Toward Sustainable Coastal Management Based on the Implementation of Blue Economy," *KnE Social Sciences* 10, No. 9 (2025). DOI:10.18502/kss.v10i9.18502.
- Ulayo, Muhammad Ramdhan, et al., "Keamanan Nasional dalam Perspektif Ancaman Asimetris dan Implikasi Globalisasi Terhadap Pembangunan Tanggul Laut di Pesisir Pantai Utara," *Aurelia: Jurnal Penelitian dan Pengabdian Masyarakat Indonesia* 4, No. 2 (2025). DOI:10.57235/aurelia.v4i2.5472.
- Wahyuddin Wahyuddin, et al., "The Role of Government in Illegal Fishing Prevention to Increase Fishermen's Economic Welfare in Aceh Province," *Jurnal Ilmiah Peuradeun* 7, No. 2 (2019). DOI: <https://doi.org/10.26811/peuradeun.v7i2.189>.
- Widyaputra, Primanda Kiky and Agustina Setyaningrum, "Pola Pemanfaatan Lahan Pesisir Untuk Kesejahteraan Masyarakat Pesisir Di Bantul, Daerah Istimewa Yogyakarta," *Public Sphere: Jurnal Sosial Politik Pemerintahan dan Hukum* 3, No. 1 (2024). DOI:10.59818/jps.v3i1.576.
- Yistiarani, Wida Dhelweis, "Kehidupan Masyarakat Pesisir di Indonesia," *Balairung: Jurnal Multidisiplin Pelajar Indonesia* 2, no. 1 (2020).
- Yistiarani, Wida Dhelweis. "Kehidupan Masyarakat Pesisir di Indonesia." *Balairung: Jurnal Multidisiplin Pelajar Indonesia* 2, no. 1 (2020).
- Yulianingsih, Wiwin, "Blue Economy dan Hak Ulayat Laut di Indonesia: Sinergi untuk Kelestarian Laut dan Kesejahteraan Masyarakat," *Jurnal Hukum Lex Generalis* 6, No. 3 (2025). DOI:10.56370/jhlg.v6i3.1086.
- Yunandar, Yunandar. "Budaya Maritim Dan Tradisi Penangkapan Ikan di Indonesia." *Sabda: Jurnal Studi Budaya* 1, no. 1 (2017). <https://doi.org/10.14710/sabda.v1i1.13243>

Websites

- "Membentang 30 Km di Tangerang, Untuk Apa Pagar Laut?" n.d.
- "Misteri Pagar Laut dan Nasib Nelayan," n.d.
- "Analisis Kasus Pagar Laut Tangerang dalam Perspektif Sosiologi PDF," n.d.
- "Ancaman Kerusakan Ekologis dan Kehidupan Masyarakat Lokal Akibat Pagar Laut Ilegal di Tangerang," n.d.
- "Dampak Buruk Pagar Laut: Merusak Ekosistem dan Ekonomi Nelayan | Indopolitika.Com," n.d.
- Hari Eko Purwanto. "Miscommunication Behind the Tangerang Sea Fence Polemic." Muhammadiyah University Jakarta, 2025.

<https://www.cnnindonesia.com/nasional/20250213140551-12-1197884/pagar-laut-tangerang-terbongkar-nelayan-minta-perketat-pengawasan>. " n.d.

"Kehidupan Masyarakat Pesisir Tangerang Terancam Pagar Laut," n.d.

"Kerugian Ekonomi Karena Pagar Laut Misterius di Tangerang: Ekonomi Okezone," n.d.

"Ombudsman: Kerugian Nelayan Akibat Pagar Laut di Tangerang Capai Rp 24 Miliar, Tempo.Co," n.d.

"Tanggapan Pemprov Banten terhadap KKP Terkait Pagar Laut 30 Km di Tangerang," n.d.

Safitri, Rieke Nur. "Dampak Perubahan Iklim pada Masyarakat di Daerah Pesisir." Januari 2019.

Sjafari, Agus, & Agus. "Di Balik Kontroversi Pagar Laut." Kompasiana.Com, 2025.

https://www.kompasiana.com/agus59520/67a2d44534777c3526618782/di-balik-kontroversi-pagar-laut?page=2&page_images=2

Interviews

Interview with Sri Astuti, Fisherman's Wife and Housewife, February 9, 2025

Interview with Sanusi, Head of Environment in Tangerang, February 13, 2025.

Interview with Ahmad, Fisherman in Tangerang, February 13, 2025.

Interview with Ismail, Fisherman in Tangerang, February 13, 2025.

Interview with Riyono Camping, Member of Commission IX of Tangerang DPRD, on February 10, 2025.

Interview with Abdul Reza, Village Office Staff in Tangerang, February 13, 2025.

Interview with Mulyono, Fishermen's Representative in Tangerang, February 13, 2025.