



GREENPEACE'S ROLE IN SUPPORTING THE GOVERNMENT OF DKI JAKARTA'S PROGRAMME TO DEAL WITH ABRASION IN THE NORTHERN COASTAL AREA OF JAKARTA

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Abstrak: Artikel ini bertujuan untuk mengetahui peran non-government organization (NGO) Greenpeace di Indonesia dalam mendukung program DKI Jakarta menangani abrasi di kawasan pesisir pantai utara Jakarta. Selanjutnya menganalisis upaya apa saja yang telah dilakukan oleh Pemerintah DKI Jakarta dalam pembangunan raksasa, proyek National Capital Integrated Coastal Development (NCICD) master plan, untuk mengatasi ancaman rob yang semakin nyata di Jakarta. Penelitian ini menggunakan metode kualitatif deskriptif dengan pendekatan teori organisasi internasional dan peran NGO dalam mengupayakan metode kampanye, melakukan litigasi, pengawasan atau implementasi hukum lingkungan sebagai aktor non-negara. Kemudian teknik pengumpulan data dalam penelitian ini menggunakan wawancara secara mendalam kepada campaigner Greenpeace Indonesia dan analisis dokumen. Hasil penelitian ini menunjukkan pembangunan tanggul laut raksasa (giant sea wall) yang dibangun adalah sepanjang 37,356 km. Hingga tahun 2023, total tanggul yang sudah terbangun sepanjang 17,093 km. Sedangkan yang belum terbangun sepanjang 20,263 km, dengan rincian 9,151 km menjadi tugas Kementerian Pekerjaan Umum dan Perumahan Rakyat (PUPR) dan 11,112 km tugas Pemprov DKI. Proyek NCICD itu ada fasenya A, fase B, fase C, dan fase D. Pemprov DKI masih di NCICD fase A, jadi pembangunannya masih di pesisir. Keberlanjutan proyek NCICD fase A pada awal tahun 2024 ini terkendala banyaknya pemukiman liar warga yang memerlukan waktu untuk ditata. Disisi lain peran Greenpeace Indonesia menolak untuk mendukung program pemerintah DKI Jakarta dalam pembangunan giant sea wall karena membutuhkan biaya sekitar USD 650 miliar sedangkan anggaran pemerintah untuk iklim sebenarnya sangatlah terbatas. Menurut pandangan Greenpeace harus dikaji kembali apakah giant sea wall ini adalah solusi yang tepat bagi Jakarta, akar permasalahannya harus dielaborasi lebih mendalam apakah disebabkan oleh naiknya permukaan air laut saja dengan penurunan muka air tanah.

Kata Kunci: *Greenpeace, National Capital Integrated Coastal Development (NCICD) master plan, giant sea wall pemerintah provinsi DKI Jakarta.*

Abstract: This article aims to explore the role of Greenpeace's non-governmental organization (NGO) in Indonesia in supporting the Jakarta DKI program, which tackles abrasion in the northern coastal area of Jakarta. The article delves deeper into the efforts undertaken by the Government of DKI Jakarta to build the massive National Capital Integrated Coastal Development (NCICD) master plan project, which aims to tackle the growing threat of robbery in the city. The research employs descriptive qualitative methods, incorporating an approach to the theory of international organizations and the role of non-state actors in campaigning, litigation, monitoring, and environmental law implementation. The data collection technique in this study involves conducting in-depth interviews with Greenpeace Indonesia campaigners and analyzing documents. The results of this study show that the construction of the giant sea wall is 37,356 km long. Until 2023, the total length of embankments that have been built will be 17,093 km. Meanwhile, 20,263 km has not yet been built, with details of 9,151 km being the task of the Ministry of Public Works & Housing, Republic (PUPR) and 11,112 km being the task of government of DKI Jakarta province. The NCICD project has phases A, B, Phase C, and Phase D. The government of DKI Jakarta is still in NCICD phase A, so construction is still on the coast. The continuation of the NCICD phase A project in early 2024 is hampered by the large number of illegal settlements that require time to be organized. Greenpeace Indonesia, on the other hand, refuses to support the government of DKI Jakarta program in the construction of the giant sea wall because it costs around USD 650 billion while the government budget for climate is actually very limited. Greenpeace believes a re-examination of this giant sea wall's suitability for Jakarta is necessary. We need to delve deeper into the root of the problem, determining whether it stems solely from rising sea levels or from declining groundwater levels.

Keywords: Greenpeace, National Capital Integrated Coastal Development (NCICD) *master plan*, giant sea wall government of DKI Jakarta province.

INTRODUCTION

According to Greenpeace's research report on the economic impact of extreme sea-level rise on seven Asian cities by 2030, Jakarta is one of them. Coastal cities across Asia face an increased risk of flooding due to rising sea levels and increasingly intense tropical storms. The Intergovernmental Panel on Climate Change (IPCC) warns that the global average sea level could rise by 0.43-0.84 m by 2100. At the same time, throughout the 21st century, storms occur frequently, with more devastating wind speeds, higher storm waves, and more extreme rainfall than in the past. Jakarta faces two threats: sea level rise and sinking. Almost 17% of Jakarta's total land area is below the level at which sea water could rise if a 10-year flood occurs by 2030, posing a potential risk to its GDP of US\$68 billion (Timur 2021).

Table 1. 2030 projections for the impact of sea-level rise and flooding on GDP, populations, and affected areas in seven Asian cities

Kota	Area terdampak dalam km ²	PDB terdampak (PPP) dalam US\$ miliar (2019)	Populasi terdampak dalam juta
Bangkok	1512.94	512.28	10.45
Hong Kong	27.36	2.24	0.09
Tokyo	79.28	68.19	0.83
Jakarta	109.38	68.20	1.80
Seoul	16.52	4.69	0.13
Taipei	46.93	29.64	0.43
Manila	37.29	39.24	1.54

Source: Greenpeace East Asia Report Factsheet

The Republic of Indonesia's capital is named Jakarta. The province of Jakarta is divided into five administrative cities and one administrative district, i.e.;

- (1). Central Jakarta Administrative Cities with an area of 47,90 km²,
- (2). North Jakarta boasts a land area of 142,20 km²,
- (3). West Jakarta has a total area of 126,15 km²,
- (4). South Jakarta has an area of 145.73 km²,
- (5). East Jakarta encompasses

an area of 187,73 km², while the Administrative District of the Kepulauan Seribu occupies a surface of 11,81 km². Thirteen rivers and two canals form the 35 km coastline on the north side. It shares borders with Depok City, Bogor District, Bekasi City, and Bekasi District on the south and east sides; Tangerang City and Tangerang District on the west side; and the Sea of Java on the northeast side (Jakarta n.d.).

The coastline of Jakarta extends from the west (Muara Kamal) to the east to the coast of Marunda for ± 60 km or covers an area of $\pm 5,000$ ha. The coasts of Jakarta occupy an area along the Gulf of Jakarta on the northern shore of the city, which lies between the latitudes $06^{\circ} 00' 40''$ S and $05^{\circ} 54' 40''$ S, the longitude $106^{\circ} 40'$ and $107^{\circ} 01' 19''$ T. According to urban administrations, the coastal areas located to the west include Kelurahan Kamal Muara, Kapuk Muara, Pluit, Penjaringan, Ancol, Tanjung Priok, North Koja, Kalibaru, Cilincing, and Marunda. The majority of the housing in Jakarta's North Coast Area lies below sea level and is surrounded by a network of 13 rivers. These areas are prone to flooding, exhibit elevated pollution levels, and lead to water stagnation or marshlands. The geomorphology of this coastal area is characterized by softness and instability. Meanwhile, marine hydrology and the west monsoon's influence have caused coastal erosion and mangrove forest pollution (Suprijanto 1996).

In response to the growing threat of tidal floods in Jakarta, the government has implemented various measures, including a short-term strategy to enhance the shoreline along the coast, as well as the preparation of a massive project to construct the Giant Sea Wall. The project is known as the National Capital Integrated Coastal Development (NCICD) master plan. By 2020, the giant sea wall has been built for 13 km. The development was carried out by the Ministry of Public Works & Housing, Republic (PUPR) and government of DKI Jakarta province. The PUPR Ministry agreed to work on 11 km of the 33 km of unbuilt embankments, while the DKI Jakarta Provincial Government would work on 22 km.

Director of Rivers and Coasts of the Directorate General of Water Resources, Ministry of PUPR, Bob Arthur Lombogia, explained that of the 11 km tasked by the Ministry of PUPR, 3.75 km is already in the process of being built, which will

be completed in 2022. Following that, construction will commence on the remaining 7.25 km in 2022, with completion anticipated in 2024. Meanwhile, the DKI Jakarta Provincial Government is still waiting for the PUPR Ministry to design the 22-kilometer-long embankment. The previous agreement stipulated that the PUPR Ministry was responsible for design (Ramdhani n.d.). The DKI Jakarta Provincial Government believes that the construction of this giant embankment is a way out for Jakarta to face the threat of tidal floods (Kompas.com 2011). This project also has the task of revitalizing the coast and most importantly opening a future vision for Jakarta, designed by the architectural firm Kuiper Compagnons from Rotterdam and in collaboration with Indonesia and a consortium of Dutch companies (Witteveen+Bosa and Grintmij) (Hendrix 2011). However, because the construction required large funds, the work had to be carried out in stages with financial support from the Netherlands. In order to provide multiple benefits, the construction of this giant embankment will be accompanied by coastal reclamation. The idea of reclamation focuses more on land expansion and economic considerations. The 2011-2030 DKI Jakarta Regional Spatial Planning Plan incorporates this project plan.

Departing from the problems described above, the problem is formulated as follows:

1. What is Greenpeace's role in supporting DKI Jakarta government programs in dealing with abrasion in the northern coastal area of Jakarta?
2. What efforts have been implemented by the DKI government in building a giant embankment in the National Capital Integrated Coastal Development (NCICD) master plan project?

There aren't many studies relevant to the title that the author will be examining. The reference data is the work of Inswiasri Suprijanto, "Changes in the North Coast of Jakarta," in *Media Litbangkes* Vo. VI No. 02, 1996 (Suprijanto 1996). The results of the research in this journal are taken by the author as an initial reference and comparison of the dynamics of the North Coast of Jakarta, which were studied in the 1990s. This research will adjust the periodization of the National

Capital Integrated Coastal Development (NCICD) master plan project. The DKI Jakarta Spatial Plan 2011-2030 outlines this project.

The research by Edwin Maulana, Theresia Retno Wulan, et al. focuses on the "Abrasion Risk Reduction Strategy on the Coast of Rembang Regency, Central Java." (Edwin Maulana, Theresia Retno Wulan, dkk 2016). In this study, the author collected data on efforts to reduce the risk of abrasion through disaster mitigation efforts. We can divide disaster mitigation into two categories: structural mitigation and non-structural mitigation. One of the mitigation efforts that will be discussed is structural mitigation. We are actively developing physical infrastructure with the aim of constructing a massive sea wall project.

Next is the scientific paper entitled "Greenpeace's Efforts to Protect Indonesia's Coastal Areas Related to the Jakarta Bay Reclamation Island Project" written by Nonik Susanti in JOM FISIP Vol. 5 No. 1- April 2018. This study demonstrates Greenpeace Indonesia's stance in urging the government to stop the continuation of the Jakarta Bay Reclamation project. Greenpeace Indonesia also rejects attempts to criminalize anti-reclamation activists and will continue to stand in solidarity with all elements of society who reject reclamation. For Greenpeace Indonesia, the DKI Jakarta government must have the courage to take a stance and stop attempts to privatize coastal space (Susanti 2018).

THEORETICAL FRAMEWORK

According to Brechin and Ness, the term "international organization" generally refers to "all forms of non-state actors working at the international or global level." Intergovernmental Organization (IGO) can be considered as part of the categorization of international organizations along with International Non-Governmental Organization (INGO). IGO itself is divided into two, global and regional. Global IGOs include the UN, WTO, UNICEF, UNDP, IMF, and World Bank. ASEAN, the European Union, and NATO are examples of regional IGOs. While INGOs are also divided into two, namely INGOs that are value-oriented/non-profit/humanitarian and INGOs that are capital-oriented/profit. INGOs that are value-oriented/non-profit/humanitarian include Save the Children, ICRC, WWF,

WVI, and Asian People Forum. Multinational companies like Coca-Cola and Toyota are examples of value-oriented/profit INGOs (ferdinanduscredo99 n.d.).

References to the topic of international organizations are found in the Yearbook of International Organizations published annually since 1999 by the Union of the International Associations (UIA). This yearbook lists all types of international organizations based on different criteria. The approach to selecting organizations for inclusion in the Yearbook was supported by the Economic and Social Council of the United Nations on the clarification of the distinction between intergovernmental organizations and non-governmental international organizations. The view of the Economic and Social Council of the United Nations on intergovernmental organizations was expressed in Resolution 288 (X) of 27 February 1950: "Any international organization not established by an intergovernmental agreement shall be considered a non-governmental organization for the purposes of this arrangement."

The resolution concerns the implementation of Article 71 of the United Nations Charter on the consultative status of non-governmental organizations, and it was reinforced by Resolution 1296 (XLIV) of 25 June 1968: "... including organizations which accept members designated by governmental authority, provided that such membership does not impair the free expression of the views of the organization" (Regine Toussaint, Nancy Carfrae 2022). The problem of identifying eligible non-governmental organizations is more difficult. Resolution 288 (X) does not attempt to define what is meant by the term "international organization." Editorial experience has shown that it is useful to consider seven aspects of an organization's life as indicators of its eligibility: objectives; membership; structure; staff; finances; relations with other organizations; and activities (Regine Toussaint, Nancy Carfrae 2022).

Greenpeace, as an International Non-Governmental Organization (INGO), is here because this fragile earth needs a voice and solutions, change, and action. Around the world, Greenpeace stands together with the community, demanding accountability from various governments and companies to be responsible. From the streets to the decision-makers, Greenpeace has real power if we work together. Greenpeace, as an INGO concerned about environmental issues, has won many

victories in real action from 1999 to 2018. In 2016, Indonesia ratified the Paris Agreement and determined the NDC (National Determined Contribution), or emission reduction, to be between 29% and 41% with international assistance (Kemenangan Greenpeace n.d.).

International organizations, according to Clive Archer, have three roles as instruments, arenas, and actors. The role of OI as an instrument involves assisting its member countries in achieving specific objectives. Furthermore, the role of OI as an arena or forum where actions take place. International organizations as independent actors can make their own decisions without being influenced by power or coercion from outside the organization (Archer 2001). John McCormick asserted that environmental non-governmental organizations, while fulfilling their responsibilities in specific domains, typically employ a variety of strategies, including engaging in diplomacy with the relevant government, which they execute at the national level without jeopardizing their non-governmental status. Another method is for NGOs to conduct campaigns that represent public protest actions, with the aim of raising public awareness of environmental issues. In this case, NGOs can also conduct litigation, supervision, or implementation of environmental law as non-state actors. NGOs can also conduct research on environmental issues in the areas they are responsible for on behalf of the government. Additionally, NGOs play a crucial role in exchanging and disseminating information through the media, as they generally hold the belief that the media can effectively convey messages to the public. NGOs also provide technical assistance to other NGOs when conducting diplomacy with the government (Ruhiat Fariz Akim, Duddy Heryadi 2019). This study discusses INGO Greenpeace's efforts to support the DKI Jakarta Government's program to handle abrasion in the northern coastal area of Jakarta.

Green Politics Theory provides a perspective that green politics is present to explain the ecological crisis that is occurring by focusing on solutions in dealing with the crisis and making the environment something that must be maintained in balance by the world community. Furthermore, Haeckel posits those green politics views humans as integral parts of nature, necessitating the institutionalization of environmental issues through the formulation and determination of national policies

(S 2016). However, John Plamenantz's normative view interprets this theory as a systematic approach to government objectives, emphasizing justice, equality, rights, and green agendas. Basically, green politics theory emphasizes that there is an interdependent relationship between humans and nature. This then leads to the issue of industrialism, where certain values stem from the notion that the acquisition of material goods is paramount. According to Jonathan Porritt (Bellamy Richard, Andrew Mason 2003), the only way to meet human needs is to permanently expand the production and consumption processes, without taking into account the damage they cause to nature. This study also examines the DKI Jakarta government's approach to addressing abrasion in the northern coastal area of Jakarta, aligning with Haeckel's belief that a nation's policy must preserve the environmental ecosystem.

Global warming is the process of raising the average temperature of the earth's atmosphere, sea, and land. A rise in sea levels is one of the impacts that can occur due to changes in temperature on the earth's surface. The rise in sea levels will lead to abrasion in coastal areas. According to the Regulation of the Head (Perka) of BNPB Number 07 of 2012, abrasion is a destructive process of coastal erosion caused by ocean waves and ocean currents. Abrasion is also known as coastal erosion. Abrasion causes damage to the coastline by disrupting the natural balance of the coastal area. Destructive human activities can either naturally occur or influence the imbalance of the coastal ecosystem. Wind gusts on the water's surface trigger the formation of abrasion waves. As the waves approach the coast, they start to rub against the sea bed, causing turbulence. This turbulence then carries material from the beach bed and causes erosion of sand. The types of beaches also influence how easily sand can be eroded. The types of beaches in question are shelf beaches (the sedimentation process is more dominant), ocean beaches (the erosion process is more dominant), and island beaches (beaches that surround small islands).

One approach to reducing the risk of abrasion is to implement disaster mitigation efforts. We can divide disaster mitigation into two types: structural mitigation and non-structural mitigation. Structural mitigation is an effort to minimize disasters carried out through the construction of various physical infrastructure and technological approaches to minimize disasters. Non-structural

mitigation is an effort to reduce the impact of disasters other than physical infrastructure and technological approaches, such as making policies and regulations and strengthening community capacity (Edwin Maulana, Theresia Retno Wulan, dkk 2016). Structural mitigation is one of the mitigation efforts that will be discussed. The construction of physical infrastructure is being carried out to strive for a mega project aimed at building a giant sea wall, known as the Giant Sea Wall. This project is known as the National Capital Integrated Coastal Development (NCICD) master plan. The giant sea wall on the northern coastal area of Jakarta will be built along 46 kilometers.

METHODS

The researcher believes that the qualitative approach is the most suitable method for this study, as it allows for a thorough investigation of the individuals who serve as data sources. We selected this study because the qualitative approach not only provides numerical explanations but also enables us to observe the behavior of the research subjects under changing conditions. Using a qualitative approach allows researchers to gather as much information and delve as deeply as possible into the topics required for this study. The author employs a research method known as document analysis, also known as the analysis of documents. According to Bloor and Wood (Bloor Michael, Wood Fiona 2006), document analysis necessitates caution in understanding social issues by considering the methods used. Documents can use various sources, such as letters, official reports, administrative reports, official government agency website pages, journals, and newspapers. Generally, the classification of data collection techniques in qualitative research involves conducting in-depth interviews with both individuals and small groups. The author interviewed Adila Isfandiari, the Climate and Energy Campaigner, and Afdillah, the Oceans Campaign Team Leader from Greenpeace. The next technique is document analysis (documentary data analysis). This study uses a combination of various data collection techniques (Merriam 2009). This study uses document analysis data collection techniques sourced from Greenpeace, books (in ebook format), laws and other regulations, journals, and various mass media articles.

RESULTS AND DISCUSSIONS

Giant Sea Wall project

The Giant Sea Wall Jakarta project is part of Jakarta's giant coastal development. The project entails the construction of coastal walls, water reservoirs, and land reclamation. The construction of this megaproject was launched in 2010. Initially, the project's primary goal was flood control, but it later broadened its scope to include various sectors for regional economic development. Although the purpose of this development has expanded, the construction of the Giant Sea Wall remains oriented towards flood control because part of the DKI Jakarta area is below sea level. The decrease in sea level is caused by excessive groundwater extraction.

The government itself has conducted a feasibility study to build the embankment. The project is then known as the National Capital Integrated Coastal Development (NCICD) master plan or Giant Sea Wall Jakarta, which was designed by the architectural firm Kuiper Compagnons from Rotterdam in collaboration with Indonesia and a consortium of Dutch companies (Witteveen + Bosa and Grontmij). According to utara.jakarta.go.id, the construction of the giant embankment on Jakarta's coast will occur in three stages, with a cost ranging from Rp. 400 to Rp. 500 trillion. The three stages are as follows:

1. First stage: building coastal and river embankments and forming a coastline to protect the community and assets around it.
2. Second stage: building a sea wall on the west side, building infrastructure, freshwater ponds, connectivity, reclamation, and building and repairing environmental damage.
3. Third stage: building a sea wall on the east side, building a port economic zone, continuing the connectivity network, building a new environment, and providing solid waste management (A 2023).

The Indonesian government has officially started the initial construction of the Giant Sea Wall in the Pluit Reservoir pump house area, Penjaringan, North

Jakarta, on October 9, 2014. The initial construction phase began with the driving of 75-meter piles into the sea. The Coordinating Minister for the Economy, Chairul Tanjung, along with the State Minister for Development Planning, Armida Salsiah Alisjahbana, Deputy Minister of Public Works, Ahmad Hermanto Dardak, and Deputy Governor of DKI Jakarta for Development, Sarwo Handayani, witnessed the piling directly.

Chairul Tanjung said that the construction of the Giant Sea Wall is the first phase of the National Capital Integrated Coastal Development (NCICD) program. The construction aims to fortify the current embankment along 32 km of coastline, as well as bolster the river embankments that feed into Jakarta Bay. The government is responsible for 8 km of the 32 km, while the private sector manages the remaining 24 km. The regional and central governments carried out the 8-kilometer embankment work in 2014. The need for this embankment reinforcement stems from the significant land subsidence in Jakarta, particularly in the North Jakarta area. The land subsidence occurring at an average rate of 7.2 cm per year is quite concerning. This is part of the government's responsibility to provide safety for the community. With the reclamation in the form of the Great Garuda, it is hoped that this project can become an icon, and all entrepreneurs can participate in the NCICD program by investing both domestic and international investors (Belarminus 2014).



Gambar 1. Garuda Project

Sumber: (Merdeka.com n.d.)

DKI Jakarta needs a giant sea wall to overcome tidal flooding. The Giant Sea Wall project is part of the Jakarta Bay development project after the DKI

Jakarta Provincial Government revoked the permits for 13 reclamation islands. NCICD is a more integrated development than the giant sea wall. Special Staff of the Minister of Public Works and Public Housing (PUPR) for Water and Water Resources, Firdaus Ali, said that the giant sea wall only builds embankments. However, the NCICD will link it to the development of areas and regions. Various aspects of the environment, integration, financial economy, development of coastal areas, and the embankment will also be used as a route for trains and toll roads so that people no longer need to enter the city.

For example, from Cikarang, Bekasi, later they can go through the coastline where the embankment was built to the Banten area. So, the burden of transportation, especially heavy trucks, no longer enters the city, including Priok. The point is the same but more developed if the giant sea wall is only used to make embankments. However, if this (NCICD) does not proceed, the embankment will eventually be the site of various developments, including a new embankment, a railway, a toll road, and housing and shelters for fishermen. Firdaus hopes that the NCICD coastal embankment program can immediately complete its study or design by the end of 2018. However, his party is currently reviewing the possibility of extending the study or design until the end of 2019.

If everything goes smoothly, 2020 should be groundbreaking. This is crucial for preventing tidal waves, and it also ensures that Jakarta won't sink. Conversely, DKI Governor Anies Baswedan deemed it necessary to reevaluate the massive sea wall construction project in North Jakarta. According to him, Jakarta needs to build a coastal embankment. Jakarta genuinely requires a coastal embankment. Therefore, the construction of a wall along the coast is essential, given the sinking land in Jakarta and the fluctuating sea level. The sea level is changing. We require this wall to avert floods, making the coastal embankment indispensable. The wide embankment in front of them is the greatest sea wall that needs to be reconsidered. Anies Baswedan asserts that the water that emerges from the mainland is significantly closer to the coast (Merdeka.com n.d.).

Yusmada Faizal, the head of the Department of Water Resources, stated that the NCICD project's construction of the Jakarta coastal shoreline will have reached 13 km in 2023. Meanwhile, the DKI and the central government are prioritizing their joint efforts to restore 46 km of coastline. Yusmada explained that the remaining work of 33 km of the shore that serves to control the flood of the rob on the coast of Jakarta will be continued, with details of 11 kilometers of its performance by the Pemprov DKI, 11 kilometers of PT Pelindo II or KSOP Sunda Kelapa, and 11 km by the Ministry of PUPR. First, Muara Angke is 3.4 kilometers long, Mutiara Beach is 1.05 kilometers long, Sunda Kelapa is 2 kilometers, and Kali Blencong is 1.7 kilometers. The PUPR Ministry is in charge of Kamal-Dadap Beach, Cengkareng Drain, New Muara, Ancol Hilir, and Kalibaru. Yusmada plans to construct a shoreline, completing it in three years and implementing it in three-year increments until 2023-2025 (Wardani 2023).

Overall, the NCICD project is divided into three phases, namely phases A, B, and C. Phase A covers the construction of a coastal shoreline, while phases B and C cover the construction of a seashore, also called a giant sea wall. The Regional Development Planning Agency (Bappeda) DKI aims to complete the shore concept within three months. Once the concept is presented, Heru will hand it over to the National Development Planning Agency (Bappenas), before finally a joint work is carried out between the government of DKI Jakarta province and the central government. Construction of the coastline is now underway. In the face of the Giant Sea Wall, Governor of Jakarta Heru Budi Hartono instructed his staff to draw up the concept of development. The Regional Development Planning Agency (Bappeda) DKI aims to complete the Giant Sea Wall concept within the next three months. Once the concept is presented, it will be submitted to the National Development Planning Agency (Bappenas) before joint work is completed between the government of DKI Jakarta province and the central government (Wardani 2023).

The Ministry of Public Works and Public Housing (PUPR) responded to news regarding the urgency of building a giant sea wall in Jakarta to overcome the

threat of flooding and rising sea levels. Spokesperson for the PUPR Ministry, Endra S. Atmawidjaja, said that the central government is currently prioritizing the construction of dams for water management. Meanwhile, for flood protection, his party relies on existing coastal embankments. From PUPR's perspective, this issue remains unprioritized due to its long-term nature. The government has not yet taken any steps in that direction. Despite the existence of the master plan, no political decision has been made to proceed with its implementation. Endra clarified that the project's master plan not only aims to protect seawater, but also has the potential to foster new business and economic opportunities. The narrowing of land in Jakarta and the construction of a massive sea wall necessitate reclamation. This means that the project needs to be accompanied by vertical development. In addition to building the embankment, there is also a toll road, so we can pay for the embankment with tolls. However, the master plan is still long-term; for the short term, a coastal embankment has been built. Meanwhile, the giant sea wall is a sea wall in the NCICD project, which will be carried out by the Ministry of Public Works and Public Housing (PUPR). However, Endra emphasized that the government does not yet have an interest in prioritizing the construction of the Giant Sea Wall for Jakarta. Moreover, President Joko Widodo (Jokowi) is currently focusing on the development of Indonesian Capital City (IKN). The government is also building in Indonesia's Capital City (IKN). The NCICD solely pertains to Jakarta; the DKI government may undertake it, but the current government does not prioritize it (Wardani 2023).

The DKI Jakarta pilot aims to complete the National Capital Integrated Coastal Development (NCICD), a massive seabed project on the capital's coast, by 2027. The required total budget amounts to Rp. 1.38 trillion. Based on the NCICD graphic data obtained from DKI Jakarta's Water Resources Agency (SDA), at least four locations fall under the jurisdiction of the government of DKI Jakarta province. The route's length is determined by the results of the detailed engineering design (DED) review of the Integrated Coastal Development of the State Capital (PTPIN) of the Ministry of PUPR in 2021. The four locations/clusters are Muara Angke for 3,471 km, Mutiara Beach for 1,058 km, Sunda Kelapa for 2,070 km, and Kali

Blencong for 1,708 km, with a total budget estimate of Rs. 1,385 trillion. Here's the details:

1. Muara Angke (planned settlement 2023-2026, with an estimated budget Rp. 671 billion)
2. Pantai Mutiara (planned settlement 2025-2027, with an estimated budget Rp. 171 billion)
3. Sunda Kelapa (planned settlement 2023-2025, with an estimated budget Rp. 472 billion)
4. Kali Blencong (planned settlement 2023-2024, with an estimated budget Rp. 71 billion) (Azzahra 2022)

Overall, the giant sea wall built is 37.356 km in length. The embankment has reached a total length of 17.093 km so far. Meanwhile, the PUPR Ministry is responsible for the unbuilt portion of 20,263 km, specifically 9,151 km, while the government of DKI Jakarta province is responsible for the remaining 11,112 km. The data also outlines the relocation needs for NCICD. The details are for 4.4 hectares of residential area for Adem River and Muara Angke Beach residents. The 8.7 hectare fishing boat parking area includes 2.6 hectares in the Kali Adem, 2.2 hectares in Pantai Utara, and 3.9 hectares in Pantai Timur.

Riska Komala, the Head of Planning for Rob and Coastal Areas at the DKI Jakarta SDA Agency, clarified that NCICD is a long-term project, and it has recently entered phase A, located on the coast. The project is called NCICD; it has phases A, B, C, and D. We are still in NCICD phase A. Therefore, while construction is still underway on the coast, President Jokowi is primarily concerned about the construction of the massive sea wall in NCICD phase B. Phase B is still being planned by Bappenas and the PUPR Ministry (Azzahra 2022).

Mayor Ali Maulana Hakim of North Jakarta has announced the continuation of this NCICD phase A. The large number of illegal settlements hampered a project, requiring time for arrangement. The layout of the area in question does not imply land acquisition. However, the coastal embankment project will relocate the surviving residents. The acquisition pertains to people's assets, not land. The local government owns the area, which is why they plan to relocate the residents from

the outskirts. Head of the Water Resources (SDA) Agency, Yusmada Faizal, said that the 11 km handled by the government of DKI Jakarta province are in four clusters, namely in Muara Angke, Pantai Mutiara, Ancol Barat, and the Kali Blencong cluster. According to Yusmada, the work will take place over a period of multiyears or three years, specifically from 2023 to 2025. For the three years of construction along the 11 km of coastal embankment, there was a total budget of around Rp. 595 billion. For the time being, the three-year budget is Rp. 595 billion for the Ancol Barat, Muara Angke, and part of Blencong clusters (Nelfira 2023).

Greenpeace's role in Indonesia

Greenpeace was present in Indonesia in 2005. The Department of Justice and Human Rights officially registered Greenpeace Indonesia as an association with six founders under its founding act, in accordance with Indonesian laws. Greenpeace Indonesia focuses its campaign on oceans, urban issues, climate, and energy. The government program in the giant sea wall as a solution to the impact of the rise of sea level and the fall of groundwater in the area of Jakarta has divided the author's research into two issues of the campaign that are the focus of Greenpeace: oceans, climate and energy.

Greenpeace has released a report on the projected economic impacts of extreme sea level rise on seven Asian cities by 2030. Greenpeace East Asia created this report, which focused on the seven projected cities, including Jakarta, and included Greenpeace Indonesia as a contributor to the research. The writing team from Greenpeace Indonesia did not take too long to consult in the research process for this report because the model had been determined. The most extreme model uses business as usual; the Intergovernmental Panel on Climate Change (IPCC) model itself has many scenarios; this report uses the RSP 8.5 scenario. All scenarios predict that a 10-year flood will submerge these seven cities. The combination of the 10-year flood and the rising sea levels ultimately alerts these coastal cities, particularly Jakarta, which play a significant economic role in their countries, to the risk of sinking. The research process carried out by the Greenpeace team took quite a long time before this report was published in June 2021 (Isfandiari 2024).

The climate and energy division of Greenpeace Indonesia concentrates on the energy crisis, which is the primary contributor to the climate crisis. This division also focuses on sea level rise. On this issue, Greenpeace Indonesia has been a dominant campaign organization in the community, raising awareness about the climate crisis and its impacts from rising sea levels, an issue that not all levels of society fully understand. In general, Indonesians still view disasters as destiny and religion. We have carried out dialogues with the community, academics, held seminars, and collaborated with national media like RCTI to raise awareness about the north coast of Jakarta. The north coast of Jakarta has two causes, namely rising sea levels and land subsidence. In 2021, Greenpeace produced a film named *Tenggelam Dalam Diam*, which details their efforts to identify the coastlines in Java's north that are sinking. One such incident took place on the north coast of Jakarta in Muara Baru, where the Wal'Aduna Mosque has completely submerged. Greenpeace has conducted various campaigns to educate the public about the ongoing climate crisis, ranging from serious seminars to artistic mediums like films and exhibitions.

Greenpeace advocates for the government to intensify its efforts in addressing climate change and implementing an energy transition. The government needs to promptly implement comprehensive climate measures, encompassing adaptation and equipping the community to withstand and surmount the effects of the climate crisis, thereby promoting high climate resilience. This includes setting up necessary infrastructure, such as a massive sea wall or an early warning system, and raising community awareness. Greenpeace evaluates that the current lack of community awareness stems from the government's failure to acknowledge the climate crisis; it remains at the level of climate change, preventing a "sense of crisis." Furthermore, how can we enhance the community's ability to respond to disasters, particularly those occurring along the coast.

The giant sea wall's construction costs around USD 650 billion, or 900 trillion rupiah, while the government's budget for climate is actually very limited. Greenpeace argues that we need to reevaluate the suitability of this massive sea wall for Jakarta; we need to delve deeper into the underlying cause of the issue, exploring if it stems solely from the rise in sea levels and the subsequent decline in

groundwater levels. To find a suitable solution to counteract the decline in groundwater levels in Jakarta, it's important to acknowledge that the city's massive sea wall has experienced multiple leaks. A case study on the giant sea wall in Demak revealed that it has deteriorated the land surface along the coast of Demak. On the adaptation front, the government should be able to prioritize natural solutions by planting mangroves, for example. With a limited budget, it should be possible to find a strategy for the best solution from the adaptation side.

Greenpeace prioritizes mitigation by advocating for the government to decrease greenhouse gas emissions. This is crucial because, even with adaptation measures in place, if the source of greenhouse gas emissions continues unabated, the effort to combat this climate catastrophe remains inadequate. The government's commitment needs to be more ambitious; according to Greenpeace's records, Indonesia's commitment remains highly insufficient, despite being one of the top 10 contributor greenhouse gas emissions to global. Furthermore, how can we encourage the government to reduce the energy sector, which accounts for the majority of Indonesia's emissions, and transition to a more sustainable energy system (Isfandiari 2024).

Greenpeace has conducted observations on the issue of coastal abrasion in various regions, namely those that occurred on the Maros Makasar coast, then the north coast of Muara Gembong in Bekasi Regency. Massive abrasions occurred in the early 2000s, causing residents to evacuate. At the mouth of the Citarum River, there was originally a stretch of green mangrove forest. However, the migration of high populations gradually transformed the mangrove forest into fish and shrimp ponds, leading to the erosion of the forest. This condition made the coastal area no longer strong enough to withstand sea water and abrasion. Daily submersion in sea water nearly damaged numerous houses, places of worship, and schools, rendering them unfit for human habitation. Many houses, left alone, slowly crumbled under their own weight.

Greenpeace differs from other environmental NGOs that focus on specific areas of assistance or problem-solving. Greenpeace is a campaign organization that prioritizes public awareness, actively engages with the government, and advocates for companies and businesses involved in environmental destruction. Greenpeace

conducts extensive research, mitigates environmental damage, and educates people through the production of documentary films. Based on research findings from university professors, Greenpeace opposes the construction of a massive sea wall. Occasionally, the benefits of the coastal reclamation project are not felt by the fishermen, despite their need for the coastline. On the other hand, as a non-governmental organization, Greenpeace is always open to discussions with the government about important environmental issues. Today and in the past few years, the government has rarely had discussions, not even during the initial planning stage. Sometimes, Greenpeace is invited to discuss when the planning will occur and how to respond to the plan. The Greenpeace Team's data analysis from scientific references leads us to believe that the government's proposed plan is unsuitable for continuation or agreement. As a result, we will firmly oppose it. The government has recently released numerous policies, including the Omnibus Law, the Minerba Law, Measured Fishing, and sedimentation in the sea. There is space for discussion, but the focus should be more on public criticism. When Greenpeace's attitude is rejected, there is no more room for discussion, let alone being asked for input or even refusing to attend. Regarding this giant sea wall, Greenpeace assesses from several scientific references that the policy of making this project will be opposed by many people and its benefits will be in vain for coastal communities if the government does not study more deeply what is the root of the problem of coastal abrasion on the north coast of Jakarta (Afdillah 2024).

Indonesia's current position is very land-based. Despite Indonesia being a maritime country, our policy-making approach remains primarily land-based. Indonesian society itself has not realized that the contribution of the sea to everyday life is very large. We, the younger generation, must understand the sea as a whole. The sea produces 70% of the oxygen on earth. The sea regulates the climate, influences the occurrence of rain, and provides fresh water for human consumption. Furthermore, government policies should not solely focus on land-based issues; it is crucial to safeguard our seas as a maritime nation, for instance, by implementing policies on fishing. Sea sand mining destroys the pH of the sea and dead coral reefs, threatening a dead sea and affecting our joints of our life. Furthermore, we must invite small fishermen and coastal communities to participate in the dialogue, as

they will be directly affected by the policies formulated for the massive sea wall construction project. Since the coast serves as their primary source of livelihood and has become ingrained in their culture, they may struggle to find alternative livelihoods if they choose not to become fishermen (Afdillah 2024).

CONCLUSIONS

Greenpeace Indonesia refuses to support the DKI Jakarta government's initiative to build a giant sea wall. Numerous factors support Greenpeace's decision to oppose the construction:

1. Estimates place the cost of building a giant sea wall at around USD 650 billion, or Rp. 900 trillion, compared to the government's extremely limited budget. Greenpeace argues that we should reassess the suitability of this massive sea wall for Jakarta, delving deeper into the issue to determine if it stems solely from rising sea levels and declining groundwater level.
2. Greenpeace's assessment, based on numerous scientific references, indicates that many individuals will oppose the project's policy, and the benefits for coastal communities will be insignificant if the government doesn't conduct a thorough investigation into the underlying causes of the coastal erosion on Jakarta's north shore. Occasionally, the benefits of the coastal reclamation project are not felt by the fishermen, despite their need for the coastline.

As a campaign organization, Greenpeace has engaged the community in a variety of ways, ranging from straightforward to intense, utilizing seminars and artistic mediums like films and exhibitions to inform the public about the ongoing climate crisis. Greenpeace advocates to further urge the government to take climate action, to make an energy transition. The government must immediately take coherent climate action, both in terms of adaptation, then how this community is equipped so that the community can survive and overcome the impacts of the climate crisis (high climate resilience). The government must immediately take coordinated climate action, both in terms of adaptation and how this community is

equipped, so that the community can survive and overcome the impacts of the climate crisis (high climate resilience). The preparation of necessary infrastructure, like a massive sea wall or an early warning system, is crucial, along with increasing community awareness.

Indonesia's current position is very land-biased. Despite Indonesia being a maritime country, our policy-making process still heavily relies on land-based thinking. The Indonesian people themselves have not realized that the contribution of the sea to everyday life is very large. Greenpeace evaluates that the current lack of public awareness stems from the government's failure to acknowledge the climate crisis; it remains at the level of climate change, preventing a "sense of crisis." Furthermore, how can we strengthen communities to respond to disasters, especially on the coast. It's crucial to include small fishermen and coastal communities in the discussion, considering their impact on the policy-making process of the massive sea wall construction project. Given that the coast serves as their primary source of livelihood and has become ingrained in their culture, fishermen may find it challenging to adapt to new livelihood opportunities.

On the other hand, the overall development, the total length of the giant sea wall built, is 37.356 km. Until 2023, the total length of the embankment that has been built is 17.093 km. While the length that has not been built is 20.263 km, with details of 9.151 km being the task of the PUPR Ministry and 11.112 km being the task of the government of DKI Jakarta province. The NCICD project has phases A, B, C, and D. The government of DKI Jakarta province is still in NCICD phase A, so the construction is still on the coast. The continuation of the NCICD phase A project in early 2024 was hampered by the large number of illegal settlements of residents that needed time to be arranged. The layout of the area in question does not imply land acquisition. However, residents who are still surviving around the coastal embankment project location will be relocated. Meanwhile, 2024 is a year of political contestation in Indonesia, so the NCICD project did not receive serious attention from the PUPR Ministry for the construction of phase B, which is still in planning. The PUPR Ministry is still fully focused on building the new Indonesian capital city in East Kalimantan.

Bibliography

- A, Muhammad Farid. *Mengintip Giant Sea Wall Jakarta, Tujuan, Hingga Kontroversi Pembangunannya*. Januari 6, 2023. <https://voi.id/berita/241983/mengintip-giant-sea-wall-jakarta-tujuan-hingga-kontroversi-pembangunannya> (accessed April 12, 2024).
- Afdillah, interview by Vivi Pusvitasary. *Ocean Campaign Team Leader dari Greenpeace Indonesia* (Januari 30, 2024).
- Archer, Clive. *International Organizations Third Edition*. New York: Taylor & Francis e-Library, 2001.
- Azzahra, Tiara Aliya. *Ditarget Beres 2027, Proyek Tanggul NCICD Kewenangan DKI Bernilai Rp 1,3 T*. Desember 23, 2022. <https://news.detik.com/berita/d-6477626/ditarget-beres-2027-proyek-tanggul-ncicd-kewenangan-dki-bernilai-rp-1-3-t> (accessed November 23, 2023).
- Belarminus, Robertus. *Kemenco Perencanaan Bantah Peresmian "Giant Sea Wall" Numpang di Proyek DKI*. 10 27, 2014. <https://megapolitan.kompas.com/read/2014/10/27/18011011/Kemenco.Perencanaan.Bantah.Peresmian.Giant.Sea.Wall.Numpang.di.Proyek.DKI> (accessed April 23, 2023).
- Bellamy Richard, Andrew Mason. "Political Concepts." 2003. <https://www.jstor.org/stable/j.ctt155jbcx.19> (accessed Desember 15, 2022).
- Bloor Michael, Wood Fiona. *Keywords in Qualitative Methods: A Vocabulary of Research Concepts*. London: Sage Publications, 2006.
- Edwin Maulana, Theresia Retno Wulan, dkk. "Strategi Pengurangan Risiko Abrasi Di Pesisir Kabupaten Rembang, Jawa Tengah." *Seminar Nasional UMS 2016: Upaya Pengurangan Risiko Bencana Terkait Perubahan Iklim*. Solo: Muhammadiyah University Press, 2016. 389-390.
- ferdinanduscredo99. *lcdc.law.ugm.ac.id*. n.d. <https://lcdc.law.ugm.ac.id/profesi-hukum/organisasi-internasional/> (accessed Maret 5, 2023).
- Hendrix, Esmeralda. *thejakartapost.com*. Juli 27, 2011. <https://www.thejakartapost.com/news/2011/07/27/dutch-study-new-dike-jakarta-bay.html> (accessed Maret 3, 2023).
- Isfandiari, Adila, interview by Vivi Pusvitasary. *Climate and Energy Campaigner dari Greenpeace Indonesia* (Januari 23, 2024).
- Jakarta, Sekilas tentang Provinsi DKI. *BPK RI*. n.d. <https://jakarta.bpk.go.id/pemerintah-provinsi-dki-jakarta/> (accessed Maret 3, 2023).
- Kemenangan Greenpeace*. n.d. Kemenangan - Greenpeace Indonesia (accessed April 4, 2023).

- Kompas.com. *Tanggul Raksasa Disiapkan*. Desember 7, 2011. <https://web.archive.org/web/20140403063907/http://megapolitan.kompas.com/read/2011/12/07/05054187/Tanggul.Raksasa.Disiapkan> (accessed Maret 3, 2023).
- Merdeka.com. *Atasi Banjir Rob Jakarta, Proyek Giant Sea Wall Akan Dikembangkan Jadi NCICD*. n.d. <https://www.merdeka.com/peristiwa/atasi-banjir-rob-jakarta-proyek-giant-sea-wall-akan-dikembangkan-jadi-ncicd.html> (accessed April 23, 2023).
- Merriam, Sharan B. *Qualitative research: A guide to design and implementation*. San Francisco: CA: Jossey-Bass, 2009.
- Nelfira, Winda. *Proyek NCICD Fase A Tanggul Pantai Jakarta Terkendala Banyaknya Permukiman Liar*. Oktober 25, 2023. <https://www.liputan6.com/news/read/5414970/proyek-ncicd-fase-a-tanggul-pantai-jakarta-terkendala-banyaknya-permukiman-liar?page=3>, (accessed November 30, 2023).
- Ramdhani, Jabbar. *Disorot Jokowi, Begini Progres Pembangunan Proyek Giant Sea Wall Jakarta*. n.d. <https://news.detik.com/berita/d-6477397/disorot-jokowi-begini-progres-pembangunan-proyek-giant-sea-wall-jakarta> (accessed Maret 3, 2023).
- Regine Toussaint, Nancy Carfrae. "Yearbook of International Organization 2022-2023 ." In *Guide to Global Civil Society Networks Edition 59*, 1-40. Brussels, Belgium: Union of International Associations, 2022.
- Ruhat Fariz Akim, Duddy Heryadi. "Strategi NGO Lingkungan Dalam Menangani Polusi Udara di Jakarta (Greenpeace Indonesia)." *Andalas Journal of International Studies Vol. 8 No. 1*, 2019: 20-21.
- S, Lestari Yeni. "Environmentalism dan Green Politics: Pembahasan Teoritis." *Community Vol.2 No. 2*, 2016.
- Suprijanto, Inswiasri. "Perubahan Pantai Utara Jakarta." *Media Litbangkes Vo. VI No.02*, 1996: 1-7.
- Susanti, Nonik. "Upaya Greenpeace Menjaga Kawasan Pantai Indonesia Terkait Proyek Pulau Reklamasi Teluk Jakarta." *JOM FISIP Vol. 5 No. 1 April*, 2018: 1-18.
- Timur, Lembar fakta Laporan Greenpeace Asia. "Proyeksi Dampak Ekonomi Kenaikan Permukaan Laut yang Ekstrem di Tujuh Kota Asia pada tahun 2030." *greenpeace.org*. 2021. https://www.greenpeace.org/static/planet4-indonesia-stateless/2021/06/95d91788-bahasa-ver_factsheet-the-economic-impact-of-sea-level-rise-in-seven-asian-cities-in-2030_signed-off.pdf (accessed Maret 3, 2023).

Wardani, Diah Ayu. *Pemprov DKI Targetkan Kelanjutan Tanggul Pantai Hingga 2025*. Januari 3, 2023. <https://voi.id/berita/241504/baru-terbangun-13-kilometer-pemprov-dki-targetkan-kelanjutan-tanggul-pantai-hingga-2025#> (accessed April 23, 2023).