

Between the Waves of the Sea Water and the Palm Oil Boom: The Life of the Bubun People in the Shadow of Oil and Gas

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ABSTRACT

This study aims to analyze the socio-ecological transformations and forms of local resistance in Bubun Village, North Sumatra, as a result of the expansion of oil palm plantations and the gas industry since the 1990s. Using an ethnographic approach with the concepts of commodified space and everyday resistance (Scott, 1985), data were collected through participant observation and in-depth interviews over two months with fishermen, farmers, and community leaders. The results show mangrove degradation, changes in coastal function, and a shift in the meaning of space from a communal living area to an economic asset. Amidst the narrowing of resource access, residents engage in micro-resistance such as picking up fallen oil palms and reclaiming space. This study emphasizes the importance of inclusive development that recognizes local practices and socio-ecological sustainability.

INTRODUCTION

The wave of industrialization that enters rural areas often brings complex socio-ecological impacts. For communities that have long lived with subsistence patterns and daily ecological relationships, the expansion of plantation and energy industries is not only affecting the economy, but also changing the way people interpret their living spaces. (Kambu et al., 2022).

This phenomenon is now faced by the people of Bubun Village, a coastal village on the East Coast of North Sumatra, who for decades have depended on the sea and mangrove forests for decades. Since the 1990s, the presence of oil palm and oil and gas corporations has accelerated spatial change through the opening of road access, mangrove conversion, and coastal reclamation. Studies have shown that the expansion of extractive industries often results in ecological degradation and triggers spatial conflicts. Studies (Li, 2014) show that the expansion of oil palm plantations is often related to land grabs and changes in power relations at the local level. (Amato et al, 2017) and (Fitzgerald et al, 2020) noted that the development of energy industry infrastructure can alter the structure of coastal ecosystems and suppress traditional livelihoods. Research (Kambu et al, 2022) also confirms that indigenous peoples and coastal villages face major challenges when industrialization disrupts their ecological knowledge systems. However, these studies generally look at dynamics at the regional and macro levels.

The environmental transformation in Bubun Village shows a more specific phenomenon: the combination of simultaneous pressure on the palm oil and oil and gas industries in the village space, a context that is still rarely studied. In addition, there has not been much research that has unraveled how society interprets the change in space phenomenologically and responds to it through the practice of microresistance. Bubun Village is a *niche case* because it shows coastal ecological changes and economic-political shifts simultaneously on a small community scale.

Located in the East Coast of Sumatra, Bubun Village is administratively located in Tanjung Pura District, Lalat Regency, North Sumatra Province. Most of the population, around 70%, depend on marine products for their livelihood (RPJMD, 2024). In addition to being fishermen, some residents also trade and plant oil palm. The construction of roads along the Tapak Kuda-Tanjung Pura route, which crosses a number of villages such as Pantai Cermin Village, Perkubuan Village, Pematang Cengal Village, Bubuun Village, to Tapak Kuda Village, has opened access to lands that were previously considered "sleeping" land. This 17-kilometer road was originally only in the form of dirt and rock roads. However, since the early 2000s, the path has begun to be hardened and partially paved. The development process is not carried out all at once, but gradually and repeatedly in several phases. The last time this road construction was carried out in 2023, with support from the oil and gas company EMP Gebang, which has just opened its operations in the region, and the palm oil company Ravolta which also contributed. These changes have a direct impact on the social and ecological life of the community. The living space of fishermen is getting narrower, and the crab catchment area that was once fertile is now lost due to the

conversion of mangrove land. Side activities such as looking for rattan or producing skewers are also increasingly unproductive. New concerns have also arisen along with the natural gas project owned by the EMP Gebang company, which is feared to displace shellfish search areas such as *Beting Kerang*.

This research contributes to enriching the study of political ecology and spatial anthropology by showing how society negotiates a narrow living space through *everyday forms of resistance* (Scott, 1985). By combining the perspective of coastal ecology and resistance theory, the study offers a new reading of how commodified space is not entirely a domain of capital domination, but also an arena of resistance. Through an exploration of the life experiences of the Bunun people, this paper provides an in-depth understanding of the relationship between industrialization, ecological transformation, and adaptation strategies of local communities.

THEORETICAL REVIEW

Political Ecology Theory

Political ecology provides a critical lens to understand environmental change as a product of power relations, political interests, and economic structures rather than purely ecological processes. According to Robbins (2012), political ecology emphasizes that environmental degradation and resource conflicts are inseparable from issues of access, control, and authority over natural resources. In the context of Bubun Village, the expansion of oil palm plantations and oil and gas industries represents a form of capital-driven environmental transformation, where coastal and mangrove ecosystems are restructured to serve extractive and accumulation-oriented interests.

This aligns with (Li's, 2014) argument that plantation expansion often leads to land dispossession and the reconfiguration of local power relations, marginalizing subsistence-based communities such as fishermen and coastal gatherers. Political ecology is particularly relevant because it allows this study to analyze how state policies, corporate actors, and infrastructure development jointly shape environmental outcomes and social inequalities. Moreover, it highlights how coastal ecological degradation is not accidental but embedded within political-economic processes that privilege industrial interests over local livelihoods.

Theory of the Production of Space

This study draws on Henri Lefebvre's theory of the production of space. (Lefebvre, 1991) argues that space is socially produced and shaped by dominant modes of production. Capitalist development transforms lived spaces (*spaces of everyday life*) into abstract and commodified spaces oriented toward accumulation and control. The construction of roads, mangrove conversion, and coastal reclamation in Bubun Village exemplify how industrialization produces new spatial orders. Roads function not merely as physical infrastructure but as instruments that open access to "*sleeping lands*," enabling plantation expansion and extractive activities.

Through this process, coastal and marine spaces that were once collectively accessed by fishermen become fragmented, restricted, or redefined as industrial zones. This theory helps explain how space in Bubun Village shifts from a livelihood-oriented ecological space to a commodified industrial space, reinforcing exclusion and spatial inequality.

Phenomenology of Space and Lived Experience

While political ecology and spatial production theory explain structural dynamics, they do not fully capture how communities *experience* environmental change. Therefore, this study also adopts a phenomenological approach to space, drawing on scholars such as Ingold (2000) and Basso (1996), who emphasize that space is constituted through lived experience, memory, and daily practice. For the people of Bubun Village, the sea, mangroves, and fishing grounds are not merely economic resources but are deeply embedded in cultural identity and ecological knowledge systems. The loss of crab habitats, shellfish areas, and mangrove forests represents not only material deprivation but also experiential dislocation a disruption of how people understand and relate to their environment. A phenomenological perspective enables this study to analyze how villagers interpret shrinking living spaces, perceive environmental risks, and reconstruct meaning amid ecological uncertainty. This approach is crucial for understanding spatial change as a subjective and affective process, rather than solely a structural transformation.

METHODOLOGY

The method used in this study is the Ethnographic Method. The use of this method allows me to be able to understand immersion to describe and understand the theme being researched. In the process, I will conduct participation observations, in-depth interviews and triangulate data to ensure the validity of the data that has been obtained (Spradley, 1979)

This research was carried out in Bubun Village, Tanjung Pura District, Langkat Regency, North Sumatra Province. Bubun Village is a village located on the coast, and the activities of its residents are centered on marine products. This research was carried out for 2 months from February 21, 2025 to April 22, 2025. This school is located on Jalan Tanjung Pura-Tapak Kuda. Mr. Rahman is known as a respected person for his contributions to the field of education in Bubun Village. To access informants, I carried it out informally and without any pressure. Often, interview activities are carried out suddenly without any planning while I participate in activities carried out by the people of Bubun Village such as; breaking the fast together in the mosque, participating in the kegi; and collective activities that are routinely carried out. The data I get will be traced back using data triangulation, either to informants or through literature studies. This allows me to be able to maintain the validity of the data in accordance with the rules of ethnographic research.

RESULTS AND DISCUSSION

The Arrival of Oil Palm Plants

The domestication of palm oil in Bubun Village began when a company called Ravolta started its expansion in Bubun Village. Initially, in the 1990s, the village community, represented by several people in the farmer group, was given land management rights by the government through the Bubun Village Government, not an individual but a group of farmers who managed the "dead land" in the Bubun Village area.

Pak Mudin (55), a fisherman and Malay rhyming expert who has lived in Bubun Village since birth, described: *"The land grant is like giving and letting a five-year-old child drive a car. Bubun residents who have never farmed and live by relying on marine products, explained Mr. Mudin, are suddenly given land to be managed without adequate assistance or training, so the result is surprise and abandonment.* With the land unmanaged, the farmer groups finally sold their land to a Chinese ethnic toke from Medan named Toke Anang.

Since then, mangrove forests that are home to mangrove crabs, rattan and nipah have slowly turned into oil palm plantations. The transfer of management rights that was originally owned by Toke Anang was transferred to the Ravolta Company which has now changed its name to an early prosperous cooperative, ultimately accelerating the process of converting hundreds of hectares of land from mangrove forests to oil palm plantations. (Maisarah, 2023).



Figure 1. View of the Ar-Rahman Foundation Building "Haunted" by Oil Palm Plants

In Indonesia, Palm Oil entered around 1848, brought during the colonial period as one of the botanical collections in the Bogor Palace. The first commercial oil palm plantation in Indonesia began to be built in 1901 in Asahan, North Sumatra by the company (Wulansari, 2016) *Societe Internationale de Plantations de Finance* (SIPEF). Then, the sustainability of this industry was supported by a government program in the 1977s called Perkebunan Inti Rakyat (PIR) through Presidential Instruction Number 1/1986 This regulation accommodates 7 plantation commodities, namely oil palm, cocoa, hybrid coconut, rubber, tea, sugarcane and cotton. Historically, the bubun area has indeed had a regional proximity to the first oil palm plantation in Indonesia. At

the beginning of the arrival of oil palm, Bubun residents did not know what this plant was, what its function was, and how to take care of it. It emerged in the golden days of the sea in the 1990s, making the Bubun people less interested in oil palm plantations at that time.

(Gultom, 2022) (McCarthy et al., 2012) At that time, Azman's father (40) was considered insane because he started buying land and planting oil palm: '*Do not throw (use) land products into the sea, they will sink, throw seafood on land, so that they will grow*'. That was the advice from Azman's grandfather that is still remembered to this day. If we examine, actually Azman's grandfather has started thinking about switching and making a living on the mainland. One thing, which was very rarely thought about by the people of Bubun Village at that time.

Currently, palm oil has become the primadonna. Those who own oil palm plantations will be happy, as well as those who do not because they can work to get wages in "harvesting" the plantations of others or companies. Based on data from the Sub-district in the 2024 Figures, the area of Bubun Village is around 1800 Ha, 650 Ha of which is oil palm plantation land, then 264 Ha is mangrove forest. In the past, this 650 hectare oil palm land was also a mangrove forest area. The land conversion that has occurred has changed the landscape of Bubun, many of the palms that flow in the forest have been stalled due to dredging and greed of oil palm trees. Likewise, the remaining hammers have lost the aquatic animals in them. In an interview on April 16, 2025, Mirwan Pa, the Head of Bubun Village, said this, since the arrival of oil palm in the 1990s, it has killed many mangrove ecosystems. Fish, crabs and some types of shrimp can no longer be found in the remaining papules because they are no longer suitable for the conditions of the mangrove forest which are no longer the same. Oil palm plantations that do not know the rules of sticking to water streams have become a poison that kills people's expectations for mangrove forest ecosystems. (Chao, 2018; Erwiningsih, 2023; Vijay et al., 2016

Oil Palm Plantations and Their Impact on Bubun Village

Mangrove ecosystems are an important component in maintaining the stability of coastal areas. Mangrove forests not only serve as an abrasion prevention and protection from waves, but these ecosystems are also home to various marine species such as crabs, shrimp, and fish (Lampe, 2005;). In Bubun Village, the emergence of oil palm plantations since the 1990s has caused disruption of the ecological structure in the area. In the story discussed by Mr. Azman, 650 hectares of oil palm land were once mangrove forest areas. (Ramadhan et al., 2022)

The changes that have occurred to oil palm plantations have implications for the loss of some *species* that live in the Mangrove Forest. The Head of Bubun Village, Mirwan Pa, said that crabs and shrimp used to be abundant in the malls are now difficult to find. This occurs as a result of the blockage of river flows due to oil palm plantation activities. Degradation of Mangrove Forests in the long term will cause increasingly uncontrollable flash floods. Mangroves do function as a wave barrier and prevent abrasion on the walls around the coastline. According to the stories of various informants, tidal floods routinely flood the

village 2 times a year, namely, from January to February and then from July to August to coincide with large waves coming from the sea.

The most affected settlements are those living on the banks of the Batang Serangan River, such as people in hamlets 1, 2 and 4 Pak Arul (40) is a fish storage toke recalling his childhood. In the past, Bubun was so beautiful with coconut trees that grew beautifully along the road, in the river trunk the water was clear, there were also sands on the riverside which was usually a place to play with peers. Sometimes dolphins are seen jumping while sitting on the beach. Currently, the environment has changed, coconut trees have turned into palm trees, the sand has changed to mud, as well as the water is getting yellower. According to him, this is an act of palm oil. Arbitrary palm oil without ever caring about the people who live around it. Capitalism often ignores the relationship between humans and their environment (Arturo Escobar, 1995)



Figure 2. Photo of a monkey entering a settlement and climbing a coconut tree

During my stay in the village, I saw, monkeys that were supposed to live in mangrove forests had come and invaded settlements. When referring to Vijay (2016) This is clear evidence of the loss of "home" for animals the implications of the lack of human awareness of the chain of impacts that oil palm plants can cause. Palm oil is indeed so greedy, not only consuming living space, it also pollutes the water which is the source of life. The small streams that flowed with life, were now buried with palm trees, no longer flowing and brought death to the living beings around them.(Chao, 2018; Vijay et al., 2016)

The Scallops That "Will Be" Disappear

The potential of oil and gas has actually been known and identified in the coastal waters of Bubun since the 1975s. Although, the presence builds enthusiasm and hope for a bright future for the Bubun Youth. However, recently the reclamation construction of 5 hectares carried out by a resource management company in Bubun, namely, EMP is considered to have the potential to eliminate the livelihood of shellfish. The location is on the coast of Bubun Beach which is close to the mouth of the Batang Serangan river, which is the location of the activities of small fishermen and shellfish seekers named *Beting Kerang*. *Beting Kerang* is a location on the coast of Bubun Beach which is a stretch of sandy beach.

When the sea level recedes, this area will be filled with stranded shells. The types are also diverse; There are green mussels, feather mussels, oysters, and virgin mussels. Although it is not an area that is officially designated as a location for the catch, the high activity of Bubun residents in looking for shellfish in this place makes it known and named as *Beting Kerang*. In the midst of the pressure that arises due to oil palm plantations, Bubun residents have to face other giants in the fight for access to resources. The shellfish hunters are generally women who cannot join in looking for fish in the sea. However, over time, with the fish catch becoming increasingly uncertain, my net fishermen also participated.

Children are also not spared from this activity. Arjuna (15), one of the teenagers who routinely searches for shellfish in *Beting Kerang*, said that to catch shellfish does not require special tools, only hand agility and foresight to see the existence of shellfish. When searching in shallow water, you must be observant to see the marker that clam seekers usually call *clam tai* (Hartati et al., 2018) *tai* This *clam tai* is golden yellow in color and will appear if there are shells around. In one month, Arjuna can earn an income of IDR 2,000,000 to IDR 3,000,000. With the threat to the sustainability of *Beting Kerang*, of course there are great concerns. When these catches are lost, there is no guarantee that there will be a commensurate replacement for those who depend on shellfish for their livelihoods.



Figure 3. Photo of the condition of the EMP reclamation land in Bubun Village

An unwritten agreement has also been made to alleviate the concerns of shellfish seekers, through the Bubun Village Government, EMP promises to help find any location or alternative that allows the affected shellfish seekers to continue to earn a decent income. However, this is still a discourse that will not necessarily be observed or implemented. In political ecology this is simply an attempt to defuse conflict with symbolic mechanisms. In the end, the local government could not withstand the heavy currents that arose due to industries that threatened the lives of their citizens. The existing living space will eventually disappear and change according to the needs of the industry, in this case the oil and gas industry. (Murat Arsel, 2009; Robbins & Paul, 2012) (Sean Di Stefano et al., 2022)

From the sea to the land

The increasingly dark sea accompanied by large waves that hit the ships, made the people of Bubun take an important step in deciding their way of life.

Marine products are no longer able to meet the increasingly urgent needs of life. During this time, they were very good at understanding the sea. Their calendars, moons, and ocean currents are recorded in their memory as navigators in deciding when to go to sea. Later, this navigator is no longer on target, as it is now which should have entered the "harvest" period of my bulbul fish, but the expected results have not come. Actually, not only did they fight on land, but also at sea.

The Bubun fishermen have to compete with sophisticated fishing gear belonging to big entrepreneurs from various regions such as Belawan, Pangkalan Brandan and Tanjung Pura. In addition to being sophisticated, these tools also participate in worsening the state of the ocean. The use of trawlers that catch large numbers of fish contributes to reducing the potential for new fish seeds. In addition, their large numbers have urged the Bubun Fishermen. The bubun fishermen of course do not give up, there was an incident in 2020, where they burned a boat using a trawl in the fishing area. (Ramadhan et al., 2022)

Trawl is a type of fishing gear in the form of a net that stretches to the seabed which can cause damage to coral reefs and catch fish seeds. Currently, they continue to remind trawling vessels in their fishing areas. However, it is not enough to maintain existing marine products because of their increasingly unstoppable quantity. (Walhi, 2020)



Figure 4. Fishermen's journey home from sea

The intensity of competition in the sea began to make the people of Bun start thinking of other alternatives, and one of the answers was to plant oil palm. In the past, they depended only on marine products; Catching fish, installing crab bubu and "picking" shellfish by the beach. But since the residents of Bubun saw how the results of one palm tree owned by the company, they felt that they were able to pay for the expenses of using their electricity for 1 month, the direction of life changed. While holding the net in their left hand, they also began to hold the dodos in their right hand.

Mr. Syaiful aka iful, a kadus in Hamlet 2 who is quite familiar with me in the field, is a clear example of this transition. He manages oil palm land while going to sea just like many other bubun people. Now he is not too dependent on seafood, when it is difficult to find shrimp he will rest while monitoring his 2 hectare oil palm plantation.

Shifting Livelihoods in Oil Palm Landscapes

The presence of palm oil has opened up opportunities for capital owners in Bubun Village. After previously living from the sea, they began to adapt and recognize the potential that existed on land. The capital, which used to come from fish catches, was used to open an oil palm shelter business on the terrace of his house. In Bubun Village, there are about 13 oil palm tones. 5 of them are in Bubun Hamlet and 8 others are in Bubun Hamlet.

In their yard, they lined up trucks of palm oil. Usually in the afternoon and evening, buying and selling activities will be more intense, especially at those hours the brondolan seekers have just finished their work. Unlike the curfew, this is the time when the palm ninjas sell their loot. The tokes do not care much about the origin of the fruit bunches and bunches that are sold to them, some openly accept stolen fruit. Majid, however, was even more happy to buy oil palm stolen from the company's plantations, as it was cheaper and helped in "punishing" outsiders who had seized their land. This is a form of silent resistance carried out by the Bubun community in fighting outsiders who are considered to have taken away their rights (Pahlevi, 2024; Scott & James C, 1985)

The emergence of palm oil toke itself has become a new economic point, not only parents, but also children participate in selling palm oil toke as a result of their hard work. 1 kg of palm oil will be priced at Rp. 3,000 rupiah, in 1 day Ocu (15) the son of Mr. Rahman where I live can sell 10-30 kg of palm oil oil. The money earned is not used to help with finances at home, but to increase money when it's time for kami, a day when young people gather and establish intimacy.



Figure 5. Photo of Oil palm shelter in Bubun Village

For the people of Bubun who do not have oil palm plantations and capital, they will participate in looking for sludge or fruits that fall from bunches. Generally, they will ask permission from the landowner, but Wak Yal (65) often complains that his palm fruits are disappearing. Not only taking the brondolan, they also harvested oil palm bunches. As a justification, the Bubun residents installed a shield that the land belonged to their ancestors; belong to their parents. Maybe there is a truth, in the past when it was difficult for them to find fish in the sea, the residents of Bubun Village would look for forest products such as mangrove trunks, nipah fronds and rattan. Now. The land has been transformed into oil palm land. Nipah fronds will generally be used as raw

materials to make skewers and can be sold for Rp. 6,000 per kilogram. Nipah skewers can be used as incense, broomsticks and mat making materials. Fronds seekers do not directly produce these products, they only prepare them until they become ready-to-use skewers.

The process of making nipah skewers is quite time-consuming. First, it is necessary to look for nipah fronds on the coast with a peak length of at least 1.2 M; Second, after the fronds are obtained, the leaves must first be pruned until only the stem remains; Third, nipah stems need to be dried in the sun, if the dry season the nipah stems will dry after being dried in the sun for 1 day, but in the rainy season it can take 3 days; Finally, the skewers that are ready to be sold will be collected to collectors who are also in the village and will then be distributed to entrepreneurs from Tanjung Pura. With the change in living space in the Bubun Village community, adaptive community resistance methods have emerged. Imam, for more than 20 years, has been using nipah fronds to find rupiah.

However, lately he has had difficulty getting quality nipah fronds, competition with fellow residents may be his problem. However, Imam is aware that it is oil palm that narrows this mangrove forest. Hand in hand, with the reduction of mangrove forests in the village. The abundant palm oil eventually replaced the role of nipah. The palm fronds that are pruned during harvest time will be used by Imam and other fronds harvesters to produce palm skewers. Palm skewers that are ready to use are priced at Rp. 3,500-Rp. 4,000 per kilogram, indeed not as expensive as nipah skewers, but the large number and easy access can compensate for the existing price differences.

The Meaning of Mangrove Forests

The changes that have arisen in the village have changed their meaning of the physical space that has been inhabited. In the past, the sea, mangrove forests, and land on land were interpreted as part of a living space that is not limited to economic value. Later, land and mangrove ecosystems are considered a commodity that can be transferred according to the price that can be paid by anyone who has money. The old memories of the inhabitants illustrate the striking difference between these two eras. For example, Pak Arul (40), one of the village fish toke, still remembers his childhood in Bubun which was so beautiful, coconut trees grew shady along the road, clear river water, and sandy beaches that were often a place to play with peers. In fact, according to Arul, sometimes dolphins are seen jumping on the surface of the sea while sitting on the beach. According to Arul (40): "*The environment has changed, coconut trees have been replaced by palm oil, sand has changed to mud, water has turned yellow*". This memory can illustrate how this bubun has changed socially and ecologically, the playground has been filled with plants of economic value, which has also had an impact on the state of the environment as well. (Erwiningsih , 2023)

The views of other residents also corroborate this finding. Pak Mudin (55), giving his views on the beginning of land giving to the community by the village in the 90s, he said: "*the land giving is like giving and letting a five-year-old child drive a car*". He likened it to a small child being told to drive a car, a resident who has been fishing and getting wet in the sea all his life is suddenly encouraged to

pursue oil palm farming without any experience. This confusion made many residents end up selling their land to capital distributors (toke).

The implication is that mangrove forests that have been the "home" for mangrove crabs, rattan, and nipah are slowly being eroded into oil palm plantations. Along with the transfer of management rights from individual toke to plantation companies (originally Ravolta, now the Awal Makmur Cooperative), the conversion of hundreds of hectares of mangroves took place quickly. Space transformation does not only occur on land, but also in the sea and coasts which are also in danger of losing their traditional ways. For example, Arjuna (15), a Bubun teenager who routinely searches for shellfish in Beting Kerang, said that with his foresight he was able to earn Rp2-3 million per month from the shellfish catch in the area.

The threat to this capture area caused great anxiety. Arjuna's concerns arose when a reclamation project by an oil and gas company (EMP) was lurking along the coast of Bubun. In the end, the traditional fishing space of coastal residents will be confiscated, so that its ecological and social meaning will be replaced by the economic functionality of the company alone. In this condition of changing the function of the unequal space, various forms of silent resistance by residents emerged. The theft of palm oil and its distribution is an illustration of how this works. This way is one of the forms of people renegotiating their living space. Picking up palm fruit on the street or selling it to toke is an economic activity that illustrates how the people of Bubun village have tried to save living space and maintain social space. In the end, the activities carried out by the bubun are not as simple as meeting the needs of their lives, more than that it is an act of resistance based on the desire to maintain the existing subsistence space. Although unknowingly, the entry of the palm oil and oil and gas industries has also gradually shifted their own meaning to the socio-ecological space of Bubun Village.

CONCLUSIONS AND RECOMMENDATIONS

This study demonstrates that the expansion of palm oil and oil and gas industries has profoundly reshaped the socio-ecological conditions of Bubun Village. The conversion of mangrove forests into industrial and plantation areas has significantly restricted community access to traditional economic resources such as paluh, coastal waters, and mangrove ecosystems. These changes reflect not only environmental degradation but also structural inequalities in power and representation between corporations and local communities. Despite these constraints, the people of Bubun Village are not passive recipients of industrial expansion. Instead, they actively engage in forms of everyday resistance, including informal economic practices such as collecting fallen oil palm fruits, taking fresh fruit bunches, and reclaiming access to forest spaces. These practices function as subtle yet meaningful strategies to negotiate survival and assert rights over space and resources that have been increasingly commodified.

FURTHER STUDY

Furthermore, this study reveals a fundamental shift in how living space is interpreted by the community. Mangrove forests and rivers, once understood as

communal and livelihood-based spaces, have been transformed into economic commodities accessible primarily to those with capital and power. This transformation underscores the need for development approaches that are inclusive and sensitive to local socio-cultural and ecological practices. For further research, future studies could explore the long-term impacts of everyday resistance on community resilience and environmental sustainability. Comparative studies across different coastal villages experiencing similar industrial pressures would provide deeper insights into patterns of resistance and adaptation. Additionally, incorporating gender perspectives and intergenerational experiences could enrich understanding of how industrial expansion affects social relations and resource negotiation within households and communities.

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