



The Effect of Sea Sand Mining on Fishermen's Rights

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ABSTRACT

Sea sand mining has a significant impact on fishermen who have fishing areas in Spermonde Waters. The purpose of this study is to see the impact of sea sand mining on the rights of fishermen who daily catch fish around the Spermonde Waters which are the location of sand mining. This research method is a qualitative method using data collection techniques in the form of, (1) literature review, to examine related policies; (2) Interview, to get related information; and (3) observation. The result of the research is that there are changes in the marine environment ecosystem due to this mining. The dredging of sea sand causes the sea water to become cloudy, resulting in reduced fish catches in the area. The occurrence of economic degradation of the community, especially fishermen, before and after mining occurs so that it violates the rights of fishermen that have been mandated in the law.

Keywords: Fisherman's Rights; Sea Sand Mining

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INTRODUCTION

Sand is a mining commodity which is a raw material for infrastructure development.¹ Currently, infrastructure development, road and bridge construction are considered important to bring benefits to economic activity because they provide access to the production and distribution of goods. And this is done to serve public consumption.² One of the infrastructure developments currently being carried out using sea sand as raw material is the reclamation of the Makassar New Port (MNP) phase II belonging to PT. Pelindo IV. As a result, large-scale mining of sea sand has occurred to meet the development needs. The sea sand mining activity occurred in the Spermonde Archipelago which is a fishing area for fishermen.

The Spermonde Islands are a group of islands in Spermonde located in the waters covering the southern part of Takalar Regency, Makassar City, Pangkep Regency, to

¹ Dini Widyasmarani Suherman. (2015). "Dampak Penambangan Pasir Terhadap Kondisi Lahan dan Air di Kecamatan Sukaratu Kabupaten Tasikmalaya". *Jurnal Pengelolaan Sumberdaya Alam dan Lingkungan*, 5(2): 99-105

² Sartono. (2019). "Kebijakan Pengembangan Infrastruktur Transportasi Laut pada Dinas Perhubungan Kabupaten Muna Barat". *Journal Publicuho, Universitas Halu Oleo*, 2(2): 84-98.

Barru Regency.³ Spermonde waters have a fairly high level of coral reef diversity consisting of 78 genera and sub genera and are included in the world's coral triangle with a total of 263 species, about 80-87% of which are found in the outermost coral reef areas.⁴ These waters are the main economic source for coastal communities and the largest supplier of high quality fish in the Makassar area.⁵

This sea sand mining has an economic and social effect on people who work as fishermen who often look for fish around the mining area. Prior to the sea sand mining activity, fishermen's lives were normal and prosperous. The average income of fishermen ranges from Rp. 200,000 to Rp. 2,000,000. However, since the sea sand mining activities, fishermen have suffered and lost.⁶

Mining of sea sand in Spermonde waters is not the first time that has happened. Sea sand mining has occurred in Takalar. PT Yasmin and PT Ciputra in collaboration with PT Boskalis carried out dredging in Galesong waters. Although it was stopped in 2018 because the CPI (Centra Point of Indonesia) reclamation project was temporarily discontinued by the developer. However, the effect of sand mining is starting to be felt by the surrounding community. From WALHI South Sulawesi's research, the sand mining has resulted in 250 fishermen changing professions to become informal workers such as stone masons and scavengers. In addition, the income of 6,474 serving people decreased by 80%. Another effect is coastal abrasion. In almost all villages there was abrasion of 10 to 20 meters, as a result, houses were heavily destroyed and 2 public cemeteries were badly damaged.⁷

The rise of sand mining cases in South Sulawesi was influenced by the policy of the South Sulawesi Government which issued Regional Regulation No. 2 of 2019 concerning the Zoning Plan for Coastal Areas and Small Islands (Perda RZWP3K South Sulawesi). The regulation gives legitimacy to companies to carry out environmental destruction in the form of sea sand mining and reclamation in the coastal areas of South Sulawesi Province. This policy is contradictory to the people. This Regional Regulation RZWP3K Sulses contradicts Article 28 H Paragraph (1) of the Constitution of the Republic of Indonesia. The constitution guarantees every citizen to have a good and healthy environment, but instead, local government produced legal product that is not in favor of the interests of the people and the environment.⁸

³ Rasyid, A Dan Ibrahim. (2013). *Spermonde, Kondisi Oseanografi Versus Ikan Pelagis*. Makassar: Masagena Press.

⁴ Jompa. J. (2010). "Kondisi Ekosistem Perairan Kepulauan Spermonde: Keterkaitannya Dengan Pemanfaatan Sumber Daya Laut Di Kepulauan Spermonde Condition Of Spermonde Ecosystem: Its Relationship With The Utilization Of Maritime Resources Of The Spermonde Archipelago". Divisi Kelautan Pusat Kesiatan Penelitian. Universitas Hasanuddin Makassar

⁵ Kordi, Ghufroon Djapari. (2010). *Ekosistem Terumbu Karang, Potensi, Fungsi, Dan Pengelolaan*. Jakarta: Rineka Cipta.

⁶ Muhammad Al Amin, Slamet Riadi, Didi. (2021). "Panraki Pa'boya-Boyangang, Oligarki Proyek Strategis Nasional dan Kerusakan Laut Spermonde". Wahana Lingkungan Hidup Indonesia (WALHI) Sulawesi Selatan.

⁷ Catatan Akhir Tahun WALHI Sulsel. 2018. Sulawesi Selatan 2018: Degradasi Lingkungan dan Pengaplingan Ruang Hidup Rakyat Terus Meningkat, Keselamatan Rakyat Terancam

⁸ *Ibid.*

Law No. 7 of 2016 concerning the Protection and Empowerment of Fishermen, Empowerment of Fishermen, Fish Cultivators and Salt Farmers mandates the protection of fishermen in order to achieve social and environmental welfare in a just manner. The marine potential owned is said to be very strategic to be utilized in order to achieve people's welfare as mandated in Article 33 Paragraph (3) of the 1945 Constitution which states that "earth, water and natural resources contained therein are controlled by the state and used for the maximum benefit of the people." the magnitude of the people's prosperity." This study was conducted to see the impact of sea sand mining on the rights of fishermen who daily catch fish around the Spermonde Waters which are the location of sand mining.

METHOD

This study uses a qualitative method. Several data collection techniques were carried out in order to obtain comprehensive data. Among them; (1) Literature review, to review a related policy; (2) Interview, to dig up related information; and (3) observation. This research was conducted on Kodingareng Island, South Sulawesi Environmental Management Service and the South Sulawesi Forum for the Environment (WALHI).

DISCUSSION

Sea Sand Mining

The sea sand mining project in fishing areas is a support activity for the development of a national strategic project, namely the Makassar New Port (MNP). The source of material for the reclamation of Makassar New Port (MNP) is in the Spermonde Block which has been regulated in the Regional Regulation on Zoning Plans for Coastal Areas and Small Islands (RZWP3K) of South Sulawesi. Makassar New Port (MNP) is one of the National Strategic Projects (PSN) which has been being built on the coast of Makassar City. The construction of this project requires sand material from the Spermonde Block.⁹

The Queen of the Netherlands ship owned by PT Royal Boskalis has been dredging sea sand in the Spermonde block since February 13, 2020. This sea sand dredging is right in the fishing area of Kodingareng Island fishermen, namely Copong Lompo, Copong Ca'di, Bonema'lonjo and Pungangrong.¹⁰

The existence of sea sand mining activities has changed the lives of fishermen, especially on Kodingareng Island, where most of the people are fishermen who look for fish around the mining area every day. Here are some of their perceptions of the existence of these mining activities.

1. Mining activities make sea water cloudy so that fishermen's income has decreased due to reduced fish in the catchment area.
2. Since the sea sand mining activity, the wave height has only reached about one

⁹ Muhammad Al Amin, Slamet Riyadi, Didi. 2021.

¹⁰ ibid

meter but currently it reaches three meters, so that fishermen find it difficult to face the wave currents to find fish around these waters.

3. Changes in ocean currents endanger fishermen because they cause accidents to fellow fishermen and also sink their boats.
4. The emergence of fear of the impact of abrasion due to sea sand, because the fishermen of Kodingareng have seen and witnessed for themselves how the environment changes around their fishing area; and
5. Some fishermen have left their hometowns with their wives and children to make a living.

From direct observation, there are several environmental effects and risks that began to occur after the sea sand mining activity, namely, the water became cloudy, the depth of the sea water was increasing, coral reefs were destroyed, the waves were getting higher, and the waves were getting bigger. The brightness of the sea water affects the quantity of fish, especially those that live on coral reefs.¹¹ The phenomenon of very high sea water turbidity due to sea sand mining activities has an impact on the health of coral reefs as a habitat for spawning, child rearing, and foraging for a number of marine organisms. If coral reefs are polluted, it is certain that the marine life in them will also be polluted and even die.

Considering the enormous impact, the President of the Republic of Indonesia through Presidential Instruction (Inpres) No. 2 of 2002, dated March 13, 2002, concerning the Control of Sea Sand Mining. This Presidential Instruction was immediately followed up with Presidential Decree No. 33 of 2002 dated May 23, 2002 concerning the control and supervision of the Sea Sand Concession which is the formation of the Sea Sand Concession Control and Supervision Team. Based on the Presidential Decree of 2002, there is a rule that "sea sand is a sand mineral found throughout Indonesia's coastal and marine waters, which is not classified as class A and/or B minerals according to its economic point of view and sea sand is one of the natural resources. non-renewable". However, sea sand mining is still allowed according to existing laws and regulations if it is carried out in accordance with the predetermined sea sand mining provisions and regulations.¹²

Sand mining at sea is prohibited from being carried out at sea as regulated in Law of the Republic of Indonesia No. 27 of 2007 and revised by Law of the Republic of Indonesia No. 1 of 2014 concerning Management of Coastal Areas and Small Islands. Article 35 Paragraph (1) states that sand mining is carried out in an area which if technically, ecologically, socially, and/or culturally it causes environmental damage and/or environmental pollution and/or harms the surrounding community and violates Article 109 of the Law of the Republic of Indonesia No. 32 of 2009 concerning Environmental Management.

Although the law clearly regulates this sand mining. However, there are still various

¹¹ Edrus. I, N & E. Setyawan. (2013). "Pengaruh Kecerahan Air Laut Terhadap Struktur komunitas Ikan Karang Di Perairan Pulau Belitung". J. Lit. Perikan. Ind. Vol.19 (2) Juni. 56 55-64

¹² Erdi Suroso. (2020). "Dampak Penambangan Pasir Laut". Lampung: Universitas Lampung <https://www.unila.ac.id/dampak-penambangan-pasir-laut/>

violations that can harm the community, especially fishermen. The effects of sand mining are:¹³

1. Mining or dredging of sea sand causes very high levels of sea water turbidity. Turbid sea water will have an impact on coral reefs as a habitat for spawning, spawning, child rearing, and foraging for a large number of marine organisms, especially those with important economic value. If coral reefs are polluted, the death of marine life in them will also be polluted. Only a few types of biota can survive. The existence of coral reefs is influenced by the clarity of the water, easily damaged even by human activities that produce sediment.
2. Dredging of sea sand triggers a reduction in fish catches by fishermen. This is because the entire contents of the ocean are sucked in indiscriminately. Not only the sand that was removed, but the eggs, young fish, coral reefs, and other biota were also destroyed.
3. Mining of sea sand triggers abrasion and the loss of small islands. In Muna Regency, this impact has begun to appear, namely sand mining activities around Munante Island have threatened the loss of the small island.
4. Dredging of sea sand causes changes in current patterns and changes in the geomorphological structure of the coast. If the entire contents of the sea are sucked in indiscriminately, then not only the sand that is removed, but the eggs, young fish, coral reefs, and other biota will also be destroyed.
5. Cause turbulence which causes an increase in suspended solids levels on the seabed.
6. Increase the intensity of tidal water flooding, especially in coastal areas where sea sand mining is located.
7. The emergence of social conflicts between pro-environmental communities and sea sand miners.

Article 36 Paragraph (1) of the Law of the Republic of Indonesia Number 32 of 2009 requires every business or activity that is required to have an environmental impact analysis (AMDAL) to have an environmental permit. Environmental permit is a permit that is given to every person who carries out a business/activity that requires an amdal or environmental management effort (UKL)-environmental monitoring effort (UPL) in the context of environmental protection and management as a prerequisite for obtaining a business and/or activity permit.

Based on data from the Environmental Management Office of South Sulawesi Province, the process of granting an AMDAL permit for sea sand mining is in accordance with applicable procedures. A simulation of the distribution of turbidity in water as a result of the mining has even been carried out. The distribution area of turbidity during sand mining operations is a maximum of 300 meters from the dredging location point and the turbidity will settle to the seabed with a duration of one hour and the sea water will return to normal (clear).

¹³ Fachrul Islam Hidayat. (2020). "Dampak Reklamasi Pantai dan Tambang Pasir Terhadap Ekosistem Laut dan Masyarakat Pesisir". Departemen Teknik Sistem Perkapalan, Fakultas Teknik, Universitas Hasanuddin.



Source: Environmental Management Office of South Sulawesi Province

Impact of Sea Sand Mining on Fishermen's Rights

The Unitary State of the Republic of Indonesia as an archipelagic State characterized by the archipelago, has full ownership of its territory as well as sovereign rights or exclusive rights outside its area of ownership (Exclusive Economic Zone) and certain authority or authority to manage and utilize as much as possible for the welfare and prosperity of the Indonesian people.¹⁴ As mandated in the Preamble to the 1945 Constitution of the Republic of Indonesia that the purpose of the establishment of the Republic of Indonesia is the General Welfare, and Article 33 paragraph (3) of the 1945 Constitution of the Republic of Indonesia: "Earth and water and natural resources contained in controlled by the state and used for the greatest prosperity of the people".

Considering that Indonesia's territory consists of 77 percent of the ocean, of course, the sea is very important for Indonesia. The sustainability of the sea is something that must be fought by Indonesia.¹⁵ Indonesia's ocean area which contains a very large and diverse marine economic potential. There are at least 13 (thirteen) sectors in the ocean, which can be developed and can contribute to the economy and prosperity of the Indonesian people, which include: a. Capture fisheries, b. Aquaculture, c. Cultivation processing industry, d. Marine biotechnology industry, e. Mining and energy, f. Maritime tourism, g. Sea transportation, h. Maritime industry and services, i. Small islands, j. Non-Conventional Resources, k. Marine building, l. Valuable objects and cultural heritage, m. Environmental services Conversion and Biodiversity.¹⁶

The fishery sector as one of the natural resources has an important and strategic role in the development of the national economy, especially in increasing the expansion of employment opportunities, income distribution and improving the standard of living of the nation in general and increasing the income of fishermen in particular. However, it is very unfortunate, less than 14.58 million people or about 90% of the 16.2 million

¹⁴ Endang Retnowati. 2011. Nelayan Indonesia Dalam Pusaran Kemiskinan Struktural (Perspektif Sosial, Ekonomi Dan Hukum). Perspektif Jurnal. Volume (16) 3. 149-159

¹⁵ Yohanes Hermanto Sirait dan Ai Permanasari. 2020. Marine Litter Management Policy: State Responsibilities And The Role Of Local Wisdom. *Mulawarman Law Review*. Volume (5) 1. Hlm. 19-28.

¹⁶ Loc cit.

fishermen in Indonesia are not economically or politically empowered and are below the poverty line.¹⁷

Paul Durrenberger famously observed that “fishermen fish for a living. They do not make a living by going to meetings”.¹⁸ The welfare of fishermen in Kodingareng must be eroded since the sand mining began. Kodingareng Island is administratively located in Sangkarang District, inhabited by 1059 households, 2,282 men, 2,251 women with a total population of 4,533 people.¹⁹ Around 1179 people work as fishermen who daily look for fish around the Spermonde waters which are the point of sand mining activities.

Entering April to October, all fishermen from Kodingareng gather in the Copong Lompo area. Because between April and October is the east season where this season is the harvest season for fishermen in Kodingareng. However, in the eastern season of 2020, fishermen's catches decreased dramatically.

Before mining	After mining
Nelayan Pemanah	Nelayan Pemanah
Ikan bui-bui 20 Gabus/Hari	Ikan Bui-Bui 1 Basker/Hari
Ikan Tenggiri 40 Ekor/Hari	Ikan Tenggiri 1-2 ekor /perhari
Nelayan Pancing dan Jaring	Nelayan Pancing dan Jaring
Ikan Katombo 10 Gabus/hari	Ikan Katombo tidak ada
Nelayan Pancing	Nelayan Pancing
Cumi-cumi 20kg/hari/malam	Cumi-cumi 1 kg/hari/malam bahkan tidak ada
Ikan tenggiri 10 ekor/hari	Ikan Tenggiri 1-2 ekor/hari
Nelayan Bagang	Nelayan Bagang
Ikan lure 100 gabus/malam	Ikan lure 2 gabus/malam dan bahkan tidak ada
Ikan layang 100 gabus/malam	Tidak ada
Ikan Sibula 100 gabus/malam	Ikan Sibula 1 Gabus/Malam
Ikan Banyara 20 Gabus/Malam	Tidak ada

Tabel 1. Differences in the catch of Kodingareng Fishermen in 2019 (Before the Sea Sand Mine) and 2020 (After the Sea Sand Mine)

Source: WALHI 2020

¹⁷ Z Anwar dan W Wahyuni. 2019. Miskin di laut yang kaya: Nelayan Indonesia dan Kemiskinan. *Sosio-religius Jurnal*. Volume (4) 1.

¹⁸ Pujo Semedi dan Katharina Schneider. 2021. *Fishers' responses to the Danish seiner ban and the history of fisheries governance on the Java north coast*. *Maritime Studies*. 20:43–62

¹⁹ Data tahun 2018.

The data above clearly shows how the changes and declines in the number of catches and the economy of Kodingareng fishermen since the existence of marine sand mining activities in their catchment areas. This change also affects the economic circulation in the area. This is because marine products are the main source of driving the economy on the island. In addition, the economic changes are also felt by the people of Kodingareng because many of them have pawned gold or jewelry, their debts are increasing, and some of them have even sold their boats to make a living.²⁰

Basically, there are four legal umbrellas for fishermen in Indonesia, namely:

1. Law no. 7 of 2016 concerning the Protection and Empowerment of Fishermen, Fish Cultivators, and Salt Farmers;
2. Law no. 31 of 2004 concerning Fisheries and its amendments to Law no. 45 of 2009;
3. Law no. 32 of 2014 concerning marine affairs;
4. Law no. 27 of 2007 concerning the Management of Coastal Areas and Small Islands and its amendments to Law no. 1 Year 2014.

Law no. 27 of 2007 concerning the Management of Coastal Areas and Small Islands and its amendments to Law no. 1 of 2014 stipulates the coastal area as a national asset that must be managed for the greatest prosperity of the people in line with Article 33(3) of the 1945 Constitution. to communities in coastal areas, including mining zones in the spermonde block. RZWP3K must be able to pay attention to the rights of fishermen in determining the zoning of sea sand mining which can damage the ecosystem and have an effect on the economic degradation of fishermen.

Law No. 7 of 2016 serves as the main legal umbrella for the welfare of fishermen. Law no. 7 of 2016 regulates the protection and empowerment of fishermen from the planning, implementation, funding and financing stages, and supervision accompanied by criminal sanctions. Protection aims to help fishermen face difficulties related to fishing business. While empowerment aims to improve the ability of fishermen in carrying out fishing business. The community is also given space to participate in planning, implementation, funding and financing, as well as supervision.

CONCLUSION

Sea sand mining that occurs around fishing areas has an impact on the rights of fishermen who catch fish around Spermonde Waters which are the locations for sea sand mining. The mining causes the degradation of marine ecosystems and also the economic degradation of fishermen. Degradation of marine ecosystems due to dredging of mining vessels which causes sea water to become cloudy. This turbidity of sea water makes it difficult for fishermen to get fish, resulting in a decrease in the number of fish catches before and after sand mining. This is what causes the economic

²⁰ Muhammad Al Amin, Slamet Riadi, Didi. (2021). "Panraki Pa'boya-Boyangang, Oligarki Proyek Strategis Nasional dan Kerusakan Laut Spermonde". Wahana Lingkungan Hidup Indonesia (WALHI) Sulawesi Selatan. Hlm 24.

degradation of fishermen. The occurrence of sand mining has an impact on the welfare of fishermen which has been guaranteed by law.

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