

## Coastal Tourism: Marine Pollution And Lack Of Local Government Efforts

**Suhaidi; Rosmalinda; Arif;**

*Department of International Law, Faculty of Law, Universitas Sumatera Utara  
Medan, Indonesia*

*Email: suhaidi@usu.ac.id; rosmalinda@usu.ac.id; arif4@usu.ac.id;*

---

### Abstract

This study aimed to analyze how marine pollution impact coastal tourism in North Sumatera-Indonesia and the role of local government. The research conducted legal review of regulations concerning tourism, the environment and local government. Furthermore, it also conducted in-depth interviews and FGDs for informants in both districts. The results found that: (1) Marine pollution caused by tankers is not available in Medan City and Serdang Bedagai District. Pollution that occurs is household waste, livestock manure, wood or tree trunks and branches, reptiles such as dead lizards. As consequence, this pollution does not impact on the coastal tourism (2) The local Government of North Sumatera, in this case the Tourism Office, have not played a maximum role in developing coastal tourism areas that are free from pollution due to (a) until 2019, beach attractions in Medan and Deli Serdang were managed by private or private parties, none of which were managed by the local government.

**Keywords:** Coastal Tourism; Pollution Impact; Governement

### 1. Introduction

As an archipelago, Indonesia has great potential to develop the tourism industry.<sup>1</sup> Law No. 10 of 2009 on tourism explains that tourism is a variety of tourism activities and is supported by various facilities and services provided by the Community, Entrepreneurs, Government and Local Governments.<sup>2</sup> Furthermore, tourism also means traveling from one place to another, temporary in nature, carried out individually or in groups, as an effort to find balance or harmony and happiness with the environment in the social, cultural, natural and scientific dimensions.<sup>3</sup> Tourism not only has a positive impact, but there are also negative values, or in other words tourism can harm the environment.<sup>4</sup> Furthermore, the World Tourism Organization defines tourists as people who travel to places outside their usual environment and stay in the places visited for more than 24 (twenty four) hours and no more than one consecutive year, either for vacation, business or other purposes not related to the performance of a paid work from within the place

---

<sup>1</sup> Hutasoit, N., Harlen, H., & Harahap, A. (2017). *Pengaruh Jumlah Kunjungan Wisatawan Mancanegara dan Jumlah Hunian Hotel terhadap Penerimaan Sub Sektor PDRB Industri Pariwisata di Provinsi Sumatera Utara Tahun 2004-2013* (Doctoral dissertation, Riau University)

<sup>2</sup> *Ibid.*

<sup>3</sup> *Ibid.*

<sup>4</sup> *Ibid.*

visited.<sup>5</sup> Referring to the definition above, there are four elements that are interrelated with each other in tourism, namely: (1) subjects which include individuals, entrepreneurs and government- national-province and local governments, (2) activities which carried out have a purpose (3) at a certain time, (4) the existence of a place as a tourist destination.

Indonesia's national development strategy states that tourism is one of the fields that has huge contributes to the State's foreign exchange apart from the oil and gas factors. Tourism plays a role in expanding employment, encouraging and equitable regional development, increasing the welfare and prosperity of the community.<sup>6</sup> For this reason, the development of various regional potentials including tourism potential needs to be supported by supporting sectors, namely facilities and infrastructure.<sup>7</sup> Tourism development needs to be based on the natural characteristics and socio-cultural dynamics of the community.<sup>8</sup> The development of tourism products can be carried out in stages according to the consideration of community capacity, the ability of local governments, and the tenacity of business actors in seeing and managing tourism potential into useful products.<sup>9</sup> This means that the development of tourism products is carried out not in a mass manner and with drastic changes but carefully and gradually.<sup>10</sup> Priority for development is carried out with the support of planned concrete programs and activities.<sup>11</sup> Thus, all parties will learn from the process of success or failure of developing a tourism product.<sup>12</sup> One of the principles of tourism product development is the learning process from shared experiences.<sup>13</sup>

As an archipelagic country, Indonesia has a coastal area along with natural resources which are important for the economic development of Indonesian.<sup>14</sup> There are 17,508 islands and 81,000 km of coastline. This condition place Indonesia as a country that has mega-biodiversity in terms of biodiversity.<sup>15</sup> However, there are important things that need attention, namely the increasing population growth and the rapid development of expansion activities in coastal areas, for various uses (settlements, fisheries, ports, tourism objects, etc.), hence the ecological pressure on coastal ecosystems and resources.<sup>16</sup> Activities on the coast which also known as marine tourism or in bahasa Wisata Bahari

---

<sup>5</sup> Daniel Mohammad Rosyid, *Pengembangan Wisata Bahari di Kota Surabayan dalam Paradigma Pengembangan Maritim dan Energi; Perspektif Kedaulatan dan Kearifan Lokal dalam Kebijakan Ekonomi Baru*, Intrans Publishing, Malang, 2017. Hlm.116-132

<sup>6</sup> Yanto, Nur. 2014. *Memahami Hukum Laut Indonesia*. Mitra Wacana Media, Jakarta.

<sup>7</sup> Simamora, R. K., & Sinaga, R. S. (2016). Peran pemerintah daerah dalam pengembangan pariwisata alam dan budaya di Kabupaten Tapanuli Utara. *JPPUMA: Jurnal Ilmu Pemerintahan dan Sosial Politik UMA (Journal of Governance and Political Social UMA)*, 4(1), 79-96.

<sup>8</sup> *Ibid.*

<sup>9</sup> *Ibid.*

<sup>10</sup> *Ibid.*

<sup>11</sup> *Ibid.*

<sup>12</sup> *Ibid.*

<sup>13</sup> *Ibid.*

<sup>14</sup> Mariana, K. (2016). Pemberdayaan Masyarakat Pesisir Pantai Melalui Pendekatan Iczm (Integrated Coastal Zone Management). In *Prosiding Seminar Nasional Multi Disiplin Ilmu & Call for Papers Unisbank*

<sup>15</sup> *Ibid.*

<sup>16</sup> *Ibid.*

are mostly carried out in coastal areas and activities in the sea around the coast.<sup>17</sup> This type of tourism is an environmental service activity that is non-extractive in nature and can be said to be an experience economics activity and includes great potential to be developed in a sustainable manner.<sup>18</sup> Activities that can be categorized as maritime tourism include:<sup>19</sup>

1. Nautical tourism, such as sailing using various types of boats / ships, such as ferries, yachts, traditional boats.
2. Water tourism and sports such as swimming, diving, fishing, surfing, beach volleyball
3. Ecotourism & agri-tourism, such as river tours, mangrove forest tours and fish farming tours
4. Heritage & archaeological tourism, such as enjoying historical buildings
5. Cultural and culinary tours, such as enjoying traditional boats, participating in religious ceremonies, enjoying special regional food.
6. Disaster & Geotourism
7. Safari and coastal village tours

North Sumatra Province in Indonesia has 33 Districts / Cities.<sup>20</sup> This province is one of the provinces that has a coastal tourism sector in every district and even up to its sub-district.<sup>21</sup> In general, the coastal area is defined as the meeting area between land and sea; towards land, the coastal area covers the land, both dry and submerged in water, which is still influenced by sea characteristics such as tides, sea breezes, and seepage of salt water; while towards the sea it includes parts of the sea that are still affected by natural processes that occur on land such as sedimentation and freshwater flows, as well as those caused by human activities on land such as deforestation and pollution.<sup>22</sup>

The marine and fishery areas of North Sumatra Province have a very huge potential for both regional and national economies especial in Medan City and Serdang Bedagai District.<sup>23</sup> Medan City as the capital of North Sumatra Province has several coastal tourist destinations. In Medan, there are Belawan Harbor, Belawan Gabion, Siba Island Resort and Theme Park, Ocean Pacific (Olo Beach), Kampung Nelayan, Floating Restaurant, and Marina Restaurant.<sup>24</sup> Serdang Bedagai District itself has a beach length of 55 Km, 12 beaches such as Pantai Cermin, Pondok Permai, Sialang Buah, Pantai Kelang, Bali Lestari, Kuala

---

<sup>17</sup> Daniel Mohammad Rosyid, (2017) *Op.Cit*

<sup>18</sup> *Ibid.*

<sup>19</sup> *Ibid.*

<sup>20</sup> Sumut dalam Angka 2020, <https://sumut.bps.go.id/publication/2020/04/27/317f98717fcc50650c40477/provinsi-sumatera-utara-dalam-angka-2020.html>

<sup>21</sup> Tanjung, M. R., & Kurniawan, H. (2017). Sistem Informasi Geografis Objek Wisata Alam Di Provinsi Sumatera Utara Berbasis Mobile Android. *IT (Informatic Technique) Journal*, 4(2), 149-162.

<sup>22</sup> Muharuddin, M. (2019). Peran Dan Fungsi Pemerintah Dalam Penanggulangan Kerusakan Lingkungan. *JUSTISI*, 5(2), 97-112

<sup>23</sup> Suhaidi, Sutiarnoto, & Azam, S. (2019). Legal Protection For North Sumatra East Coast Fishermen In The Indemnification Of Malacca Strait Oil Spill. *Journal of Legal, Ethical and Regulatory Issues*, 22(2), 1-7. Retrieved from <https://search.proquest.com/scholarly-journals/legal-protection-north-sumatra-east-coast/docview/2238481326/se-2?accountid=50257>

<sup>24</sup> Suhaidi and Rosmalinda and Arif . (2020), *Legal Protection for Coastal and Marine Activities from Pollution of the Marine Environment*, Proceedings of the International Conference on Law, Governance and Islamic Society (ICOLGIS 2019), 175-178; <https://doi.org/10.2991/assehr.k.200306.207>

Puteri, Cemara Kembar, Mutiara Beach and Sri Mersing are managed by private parties and located in 3 sub-districts, namely (a) Pantai Cermin, (b) Perbaungan and (c) Teluk Mengkudu. There is another beach which is not productive anymore, namely Tanjung Beringin beach.<sup>25</sup> In 2006, Serdang Bedagai district legalized District Regulation No. 12/2006 concerning the Management of Berhala Island as the Eco-Tourism.<sup>26</sup>

The tourism sub-sector is currently a very reliable source of state revenue after the decline in state revenues from oil and nature.<sup>27</sup> A strategic and potential condition to be managed and marketed apart from being an industrial and trade area that is able to absorb a lot of workforce and make a large contribution to PDRB (*Produk Domestik Regional Bruto/ Gross Regional Domestic Product*).<sup>28</sup> The successful development of the tourism sector will increase regional revenues and sector revenues or PDRB in the area while at the Center it is called PDR.<sup>29</sup>

In fact, life on the coast, including on the beaches in Medan and Serdang Bedagai District, shows low income.<sup>30</sup> The welfare of Sri Mersing Beach fishermen, including human resources is still very low, fishing methods that are still traditional, lack of skills in financial management, lack of ownership of capital, and very limited technology used.<sup>31</sup> Fishermen poverty on Sri Mersing beach is one of the realities of poverty that afflicts fishermen's life in Indonesia.<sup>32</sup> The inadequate catch of fishermen to meet their daily needs is a major factor in poverty.<sup>33</sup> Other factors that contribute to poverty in coastal communities are (1) lack of capital, (2) pressure from owners of capital, (3) unfair profit sharing systems, (4) trade or fish auctions that are not transparent (controlled by middlemen), and (5) the authority does not maximize to regulate and enforce the rules.<sup>34</sup>

Regarding the environment, damage to coastal and marine ecosystems due to pollution from land areas is a factor causing poverty on the sea coast.<sup>35</sup> One study on coastal communities in Indonesia states that 60% of coastal communities in Semarang dispose of garbage directly at sea which can cause damage

---

<sup>25</sup> *Ibid.*

<sup>26</sup> *Ibid.*

<sup>27</sup> Rahma, Nadia Femy & Handayani, Retno Herinawati. 2013. Pengaruh Jumlah Kunjungan Wisatawan, Obyek Wisata, dan Pendapatan Perkapita Terhadap Penerimaan Sektor Pariwisata Di Kabupaten Kudus. Volume 2. ISEP Fakultas Ekonomi. Universitas Diponegoro

<sup>28</sup> Hutasoit, N., Harlen, H., & Harahap, A. (2017). *Pengaruh Jumlah Kunjungan Wisatawan Mancanegara dan Jumlah Hunian Hotel terhadap Penerimaan Sub Sektor PDRB Industri Pariwisata di Provinsi Sumatera Utara Tahun 2004-2013* (Doctoral dissertation, Riau University)

<sup>29</sup> *Ibid.*

<sup>30</sup> Zebua, Y., Wildani, P. K., Lasefa, A., & Rahmad, R. (2017). Faktor Penyebab Rendahnya Tingkat Kesejahteraan Nelayan Pesisir Pantai Sri Mersing Desa Kuala Lama Kabupaten Serdang Bedagai Sumatera Utara. *Jurnal Geografi*, 9(1), 88-98

<sup>31</sup> *Ibid.*

<sup>32</sup> Retnowati, E. (2011). Nelayan Indonesia dalam pusaran kemiskinan struktural (perspektif sosial, ekonomi dan hukum). *Perspektif*, 16(3), 149-159.

<sup>33</sup> *Ibid.*

<sup>34</sup> *Ibid.*

<sup>35</sup> Natalia, M., & Alie, M. M. (2014). Kajian Kemiskinan Pesisir di Kota Semarang (Studi Kasus: Kampung Nelayan Tambak Lorok). *Teknik PWK (Perencanaan Wilayah Kota)*, 3(1), 50-59.

to coastal resources.<sup>36</sup> Simmilar condition occurs in Pesisir Medan-City, based on the results of interviews with Belawan residents who said that in the Medan Belawan area, the pollution that may occur is household waste. In order to deal with this condition, there is an association called Bubu Cinta Lingkungan Fishermen. This group manages household waste, wood so that it does not interfere with the activities of residents who live from marine products.

In order to achieve the greatest prosperity of the people as stated in The 1945 Constitution of Indonesia. It is a must for Indonesian government in every level to play a role in controlling the pollution or destruction of the marine environment.<sup>37</sup> Based on this description, this paper discusses two research questions, namely: 1) how does marine pollution impact coastal tourism in Medan City and Serdang Bedagai District? and (2) What is the role of regional-district / city governments in developing free coastal tourism areas from pollution?

**2. Methodology**

This research applied the literature review concerning tourism, lingkungan hidup and local government. It also conducted field research thourgh interviewed local government, coastal business manager, and community in Medan and Serdang Bedagai. There was a guideline interview for informants to have their opinion on the kinds of sea pollution in the coastal area and the role of districts governments to develop the coastal area as tourism destination.

**3. Result and discussion**

The tourism sector is becoming the leading sector in the work program of the Indonesian government, even since 2017 it has been ranked second as the largest foreign exchange earner for the country.<sup>38</sup> The coastal tourism in Medan City is Belawan Harbor, Gabion Belawan, Siba Island Resort and Themepark, Ocean Pasific (Pantai Olo), Kampung Nelayang, Restoran Terapung, dan Restoran Marina. While the beach tour at Serdang Bedagai seperti: 1) Theme Park, 2) Kiang, 3) Mutiara, 4) Lestari, 5) Gudang Garam, 6) Permai Indah, 7) Sialang Buah, 8) Wong Rame, 9) Sri Mersing, 10) Romantis Bay, 11) Cemara Kembar, 12) Kuala Putri, 13) Pematang Mantik, 14) Nipah Indah, 15) Hutan Mangrove (Kampoeng Nipah), 16) Sentang, dan 17) Berhala Island Tourism Object which is under the supervision of the TNI-Indonesia Army, and at the same time serves as a turtle breeding location.<sup>39</sup>

Table 1. Beach Tourism Facilities in Medan and Serdang Bedagai District

No	Activities on Beaches	Name of Coastal Tourism Destination
<b>In Medan-City</b>		

<sup>36</sup> *Ibid.*

<sup>37</sup> Purwendah, E. K., & Periani, A. (2019). Implementation of presidential regulation number 83 of 2018 concerning handling of sea was in order to provide protection and preservation of the sea environment for Indonesia. *Ganesha Law Review, 1*(2), 18-37

<sup>38</sup> Soeswoyo, D. M. (2019). Kontribusi Sektor Pariwisata Dan Realisasi Rencana Induk Pembangunan Kepariwisata Kota. *Jurnal Sosial Humaniora, 10*(2), 108-119

<sup>39</sup> Sirait, M., & Pinem, M. (2019) *Op.Cit.*

1.	Port	Pelabuhan Belawan
2.	Sea Tourism	Siba Island Resort and Themepark, Kampung Nelayang, Mangrove Indah Belawan and Berhala Island.
3.	Restaurant	Ocean Pasific (Pantai Olo), Restoran Terapung and Restoran Marina
<b>In Serdang Bedagai-District</b>		
4.	Lodging, Resort and Restaurant	Theme Park-Pantai Cermin, Pondok Permai, Pantai Woong Rame, Pantai Mutiara, Pantai 88, Pantai Pondok Permai and Pantai Bali Lestari
5.	Coastal Tourism Destination	Sialang Buah, Pantai Kelang, Pantai Bali Lestari, Pantai Kuala Puteri

Source: Primary data

The existence of coastal tourism such as Medan City and Serdang Bedagai District in North Sumatra Province certainly has an impact on the welfare of the local community.<sup>40</sup> The large number of tourists who visit the beach make a potential business for the surrounding community.<sup>41</sup> This opportunity is exploited by providing various needs for goods and services for tourists.<sup>42</sup> Furthermore, the increased number of tourists visiting certainly has an impact on increasing demand for goods / services which is then followed by an increase in income which in turn will be able to improve the welfare of the surrounding community.<sup>43</sup> A study conducted in a coastal tourism area in Serdang Bedagai District shows that from 2017 to January 2018 there has been an increase in the number of household businesses engaged in tourism.<sup>44</sup> This study found that before totaling 17 business units with as many as 24 workers. After, pantai Romantis become a coastal tourist destination, it is growing up to 42 units of businesses with employees 54 people. On average the fisheries industry accounted for 53.69% of total family income for one month. While the tourism industry and other businesses contributed an average of 36.66% and 9.65% of total household income for one month.<sup>45</sup>

The fact that coastal tourism or marine tourism can improve the welfare of the coastal community must continue to be developed. It means, pollution-free coastal tourism must be used as a strategy for the sustainability of marketing tourism areas. Coasts should be transformed into areas that provide added value to the sustainable economy for local communities. Efforts to improve the environment and maintain the balance of environmental conditions and their preservation are very important. There is Law No. 4 of 1982 concerning Basic Provisions for Environmental Management. Article 1 Paragraph 1 of this law states that the environment is a spatial unit with all the forces, conditions and living things, including human beings and behaviors that affect the continuity of life and the welfare of humans and

---

<sup>40</sup> Ali, D. F. (2004). *Pemanfaatan Potensi Sumberdaya Pantai Sebagai Obyek Wisata dan Tingkat Kesejahteraan Masyarakat Sekitar Lokasi Wisata (Shull Kamm Di Kawasan Wisata Pantai Kartini Jepara) Coastal Resources As A Tourism Site And Incr. Easing Social Welfare For The People Nearby* (Doctoral dissertation, Program Pascasarjana Universitas Diponegoro)

<sup>41</sup> *Ibid.*

<sup>42</sup> *Ibid.*

<sup>43</sup> *Ibid.*

<sup>44</sup> Sirait, M., & Pinem, M. (2019) *Op.Cit*

<sup>45</sup> *Ibid.*

other living things.<sup>46</sup> Environmental resources used for tourism must be managed as well as possible in order to attract visitors because of their prominent beauty and the possibility to be creative in the context of improving the welfare of life.<sup>47</sup> Yeni Widowaty stated that development policies, plans and / or programs must be animated by the obligation to conserve the environment and realize the goals of sustainable development, decentralization, as well as recognition and appreciation of local wisdom and environmental wisdom.<sup>48</sup>

### 3.1. Marine Pollution in Coastal Tourism in Medan City and Serdang Bedagai District

Article 1 paragraph 14 of Law Number 39 Year 2009 concerning Environmental Protection and Management states that environmental pollution is the entry or inclusion of living things, substances, energy, and / or other components into the environment by human activities so that they exceed environmental quality standards which have been set.<sup>49</sup> The term pollution is refer to a situation where the environmental system is changed by human activities or by natural processes. So that the quality of the environment drops to a certain level which causes the environment to become less or unable to function anymore according to its designation. Activities carried out in residential areas on an ongoing basis certainly have an impact on environmental changes. In general, activities on land that have the potential to pollute the coastal and marine environment, such as; Deforestation; Disposal of industrial wastes; Disposal of agricultural wastes; Sewege disposal; Solid waste disposal; Mangrove swamp conversion; and Reclamation in coastal areas (reclamation).<sup>50</sup> Another study states that the source of pollution in coastal waters comes from industrial waste, sewage, urban stormwater, shipping, agriculture, and aquaculture. The main pollutants contained in the waste are: sediments, nutrients, toxic metals, pesticides, pathogenic organisms, waste and oxygen depleting substances (materials that cause oxygen dissolved in sea water to decrease).<sup>51</sup>

Table 2. Percentage of Environmental Pollution Types, 2014 and 2018

Indonesia (34 Provinces)	Water pollution		Land Pollution		Air pollution	
	2014	2018	2014	2018	2014	2018
	10,69	25,11	1,58	2,69	14,60	11,83

Source: *Badan Pusat Statistik Sumatera Utara- North Sumatra Central Bureau of Statistics*

Based on existing data, plastic waste that can be produced in Indonesian waters reaches 1.65 million tons / year. Research data has outlined the distribution of plastic waste in several countries, one of which is Indonesia. In the survey conducted, Indonesia was the second country after China with a high amount

<sup>46</sup> *Ibid.*

<sup>47</sup> *Ibid.*

<sup>48</sup> Jumali, J., Farhan, N., Razma, O., Amalia, N. F., & Sudarmiati, S. (2017). Peran Pemerintah Daerah Dalam Mengoptimalkan Penanganan Pencemaran Lingkungan Di Wilayah Pesisir Kota Batam. *Jurnal Selat*, 5(1), 25-35.

<sup>49</sup> Undang Nomor 39 Tahun 2009 Tentang Perlindungan dan Pengelolaan Lingkungan Hidup

<sup>50</sup> Bambang Pramudyanto, "Pengendalian Pencemaran dan Kerusakan di Wilayah Pesisir", *Jurnal Lingkar Widyaiswara*, Edisi 1 No. 4, Oktober-Desember 2014, hlm. 21-40

<sup>51</sup> Indirawati, S. M. (2017). Pencemaran logam berat Pb dan Cd dan keluhan kesehatan pada masyarakat di Kawasan Pesisir Belawan. *JUMANTIK (Jurnal Ilmiah Penelitian Kesehatan)*, 2(2), 54-60.

of plastic waste not managed well.<sup>52</sup> The Government of Indonesia has issued Presidential Regulation No. 83 of 2018 on handling marine waste and contains the National Action Plan 2018-2025 involving various Ministries/ Institutions and Local Governments.<sup>53</sup> In fact, based on primary data collected by researchers, it is known that the pollution in the coastal tourism area of Medan is from household waste. For this reason, there is an association called Nelayan Bubu Cinta Lingkungan which has been formed at the Port of Belawan, Medan City to anticipate this waste problem.<sup>54</sup> The results of this primary data look lighter than the results of research conducted by Indirawati which states that the Belawan Sea in Medan City has been contaminated with heavy metals.<sup>55</sup> This study further states that the findings of heavy metal pollution occurred in the waters of the East coast of North Sumatra where the Pb content in shellfish has exceeded the quality standard.<sup>56</sup> This fact should be a concern considering that the findings of primary research data related to the contamination of the tanker ship spill on the coast of Serdang Bedagai District did not find this.<sup>57</sup> Primary data only states that in the coastal areas of Serdang Bedagai District there are many kinds as sea pollutant, such as cattle waste from pigs or other livestock.<sup>58</sup> Moreover, the condition of the sea is shallow, so large ships do not pass through this area.<sup>59</sup> Tabel 3 below describe the findings of research on marine environment pollutants in Medan City and Serdang Bedagai District.

Table 3. List of Pollutants for the Marine Environment in Medan-City and Serdang Bedagai District

No	Types of Pollutants	Location	Total
1.	Household waste	Medan Belawan	Not Available
2.	Livestock Manure	Pantai Cermin-Serdang Bedagai	Not Available
3.	Wood or tree trunks and branches	Pantai Cermin-Serdang Bedagai	Not Available
4.	Reptiles (monitor lizards)	Pantai Cermin-Serdang Bedagai	Not Available

Source: Primary Data

The findings of this primary data are in line with the results of research related to tourism in Serdang Bedagai District where the findings are that the cleanliness of sea water is not good for bathing because of a lot of mud.<sup>60</sup> Moreover, it stated that the management of coastal tourism is still not optimal. This can be seen from the lack of a cooperative relationship between the manager, local government and the

<sup>52</sup> Purwendah, E. K., & Periani, A. (2019). Implementation of presidential regulation number 83 of 2018 concerning handling of sea was in order to provide protection and preservation of the sea environment for Indonesia. *Ganesha Law Review*, 1(2), 18-37.

<sup>53</sup> *Ibid.*

<sup>54</sup> Suhaidi and Rosmalinda and Arif (2020) *Op.Cit*

<sup>55</sup> Indirawati, S. M. (2017). *Op.Cit*

<sup>56</sup> *Ibid.*

<sup>57</sup> Suhaidi, Arif, Rosmalinda, Laporan Hasil Penelitian Akhir, Perlindungan Hukum Aktifitas Pantai Terhadap Pencemaran Lingkungan Laut (Studi: Lingkungan Laut Di Kota Medan Dan Kabupaten Serdang Bedagai), 2019; Unpublished

<sup>58</sup> Suhaidi and Rosmalinda and Arif (2020), *Op.cit*

<sup>59</sup> *Ibid.*

<sup>60</sup> Sirait, M., & Pinem, M. (2019) *Op.Cit.*



community which is evident in the absence of professional coastal tourism services.<sup>61</sup> Lack of beach cleanliness, lack of maintenance of coastal tourism can also be seen from the absence of beach cleaners so that the coastal tourism looks slum.<sup>62</sup> The poor condition of cleanliness of coastal tourism in Serdang Bedagai District should be minimized considering that the cleanliness of the coast in Serdang Bedagai is not influenced by ships or fish auctions.<sup>63</sup> It is only on the tourist beach of Sri Mersing which are not too many local fishing boats. Other coastal tourism such as in Sialang Buah, whose coastal waters are muddy and much influenced by fish auction places, factories and rivers that carry a lot of mud and are close to residential areas.<sup>64</sup> The findings in Serdang Bedagai are also the same as research findings in Medan which show that in the Medan Belawan area, the possible pollution is household waste.<sup>65</sup> Regarding waste management, a study shows interesting points related to tourist involvement. The cleanliness conditions in tourist destinations such as the coast have various types of waste.<sup>66</sup> One of the solid waste, the waste produced by tourists, must be managed properly. The trash bin must be cleaned every day and then disposed of at the last landfill. Meanwhile, liquid waste originating from housing or from hotels / tourist lodges / guest houses as well as from tourist sites must be managed by its own waste.<sup>67</sup>

The results of interviews with respondents at the Serdang Bedagai District Tourism Office revealed that in general there are two kinds of pollution, namely (1) garbage, and (2) household waste. Along the coast of Moderate Bedagai District there are no large factories whose waste goes directly to the sea. The obstacle felt by the government of Serdang Bedagai District is garbage from both households and tourist destinations. In 2019, the Regent of Serdang Bedagai District has set a program titled "GEMALOSARI-Gerakan Masyarakat Membuat Lobang Sampah Sendiri/ Community Movement to Make Their Own Garbage Hole. This movement is aimed at dealing with waste generated in Serdang Bedagai District.<sup>68</sup>

### *3.2. The Role of District / City Government for Pollution-Free Coastal Tourism*

Article 33 paragraph (3) of The 1945 Constitution of Indonesia states: "the earth, water and natural resources contained in it controlled by the state and used for the greatest prosperity of the people. Furthermore, Law Number 10 of 2009 concerning Tourism states that tourism development is needed to encourage equal opportunity to do business and get benefits and to be able to face the challenges of changing local, national and global life.<sup>69</sup> In fact, tourism must be in line with environmental preservation.<sup>70</sup> Article 1 number (2) Law Number 32 Year 2009 concerning Environmental Protection and Management (*Perlindungan dan Pengelolaan Lingkungan Hidup /UUPPLH*) states that environmental

---

<sup>61</sup>*Ibid.*

<sup>62</sup>*Ibid.*

<sup>63</sup>*Ibid.*

<sup>64</sup>*Ibid.*

<sup>65</sup> Laporan Akhir Hasil Penelitian Perlindungan Hukum Aktifitas Pantai Terhadap Pencemaran Lingkungan Laut (Studi: Lingkungan Laut Di Kota Medan Dan Kabupaten Serdang Bedagai), 2019, *Op Cit*

<sup>66</sup> Simamora, R. K., & Sinaga, R. S. (2016). *Op.Cit*

<sup>67</sup> *Ibid.*

<sup>68</sup> Wawancara dengan informan pada

<sup>69</sup> Pratama, A., Minin, D., & Isnaini, I. (2019). Tinjauan Yuridis Peranan Pemerintah Daerah Dalam Mewujudkan Pemerintahan Yang Baik Dalam Bidang Perizinan Pariwisata. *ARBITER: Jurnal Ilmiah Magister Hukum*, 1(1), 31-41

<sup>70</sup> Widyastuti, A. R. (2010). Pengembangan pariwisata yang berorientasi pada pelestarian fungsi lingkungan. *Jurnal Ekosains*, 2(3), 69-82

protection and management are systematic and integrated efforts undertaken to conserve environmental functions and prevent environmental pollution and / or damage from occurring includes planning, utilization, control, maintenance, supervision and law enforcement.<sup>71</sup>

Specifically related to coastal tourism, North Sumatra Province has Regional Regulation Number 5 of 2008 concerning Management of Coastal Areas and Small Islands or in Bahasa known as *Pengelolaan Wilayah Pesisir dan Pulau-pulau Kecil* (PWP3K). This regional regulation is the basis for the issuance of Regional Regulation Number North Sumatra Province No.4 of 2019 concerning the Zoning Plan for Coastal Areas and Small Islands or in bahasa known as *Rencana Zonasi Wilayah Pesisir Dan Pulau-Pulau Kecil* (RZWP3K) Provinsi Sumatera Utara since 2019 to 2039 which will write then as Perda RZWP3K. Furthermore, Article 1 number (9) Perda RZWP3K mentions that "Management of Coastal Areas and Small Islands, hereinafter abbreviated as PWP3K, is a coordinating planning, utilization, supervision and control of coastal resources and small islands carried out by the Government and Regional Government, between sectors, between land and sea ecosystems, as well as between science and management to improve people's welfare."<sup>72</sup> This article shows that the local government has a role to ensure the management of coastal tourism areas which aims to improve the welfare of the community.

The role of the provincial government in the planning area of RZWP3K includes: (a) coastal areas to the land covering the administrative boundaries of sub-districts in coastal areas; and (b) the coastal area towards the sea as far as 12 (twelve) nautical miles measured from the coastline at the time of the highest tide towards the high seas and / or towards archipelagic waters.<sup>73</sup> The regulation of the role of the Provincial Government is in accordance with Law Number 23 of 2014 concerning Regional Government. It is stated that the boundary for the management of marine areas between provinces is at most 12 nautical miles measured from the coastline towards the open sea of each province.<sup>74</sup> Meanwhile, district / city governments can obtain marine products that are within the boundaries of the 4 nautical mile area measured from the coastline towards the open sea or towards the waters.<sup>75</sup> The role of the provincial, district and city governments should be able to realize one goal of the Management of Coastal Areas and Small Islands, hereinafter abbreviated as PWP3K, namely economic development: encouraging optimal and sustainable utilization of the potential of coastal and small islands resources and equitable to build the fishery, tourism industry, marine and non-fishery industries that are environmentally friendly to spur regional economic growth.<sup>76</sup>

In particular, North Sumatra Province already has the Regional Regulation of North Sumatra Province Number 5 of 2019 concerning the Mid-Term Development Plan for the Province of North Sumatra for

---

<sup>71</sup> Jumali, J., Farhan, N., Razma, O., Amalia, N. F., & Sudarmiati, S. (2017). *Op.cit*

<sup>72</sup> Peraturan Daerah Nomor 4 Tahun 2014 Peraturan Daerah Nomor Provinsi Sumatera Utara No 4 Tahun 2019 Tentang Rencana Zonasi Wilayah Pesisir Dan Pulau\_Pulau Kecil (RZWP3K) Provinsi Sumatera Utara Tahun 2019 - 2039

<sup>73</sup> *Ibid.*

<sup>74</sup> Khomsin, K., & Simatupang, R. S. (2016). Penentuan Batas Pengelolaan Wilayah Laut Daerah Antara Provinsi Jawa Timur dan Provinsi Bali Berdasarkan Undang-Undang Republik Indonesia Nomor 23 Tahun 2014. *Geoid, 12(1)*, 83-88. Lihat juga pasal Pasal 27 ayat 3 dan Undang-Undang Nomor 23 Tahun 2014 tentang Pemerintahan Daerah

<sup>75</sup> *Ibid.*

<sup>76</sup> *Ibid.*

2019-2023 where Regional Regulation Number 2 of 2017 concerning the Spatial Plan for the Province of North Sumatra for 2017-2037 becomes part of the consideration. The existence of these two regional regulations are interrelated and support each other in realizing the objectives of Law Number 10 of 2009 concerning Tourism, namely increasing economic growth; improve people's welfare; eradicating poverty; overcoming unemployment.<sup>77</sup> These two regional regulations are also in line with Law Number 32 of 2009 concerning Environmental Protection and Management or well known as *Perlindungan dan Pengelolaan Lingkungan Hidup* (UUPPLH) which ensures the preservation of environmental functions and prevents environmental pollution and / or damage from occurring.<sup>78</sup> In terms of the delegation of authority to local governments in the field of environmental management, it contains the aim of increasing the role of local communities in environmental protection and management.<sup>79</sup>

The role of the government in carrying out tourism development including coastal tourism continues to the district and city governments. Medan City already has Medan City Regional Regulation Number 4 of 2014 concerning Tourism.<sup>80</sup> A different thing was found in Serdang Bedagai District, until in 2019 through a search on the district's official website related to legal products it was known that this District did not have a Regional Regulation on Tourism.<sup>81</sup> The main duties and functions related to tourism in Serdang Bedagai district are in the Office of Youth, Sports, Tourism and Culture.

The development of coastal tourism that is free of pollution is the responsibility of the district / city government. The role of the government in developing the tourism potential of its region as: (1) Motivator, in tourism development, the role of local government as a motivator is needed so that the tourism business continues to run; (2) Facilitator, the role of the government as a facilitator is to provide all facilities that support all programs that are held; (3) The dynamist, in the pillar of good governance, in order for an ideal development to take place, the government, private sector and society must be able to synergize well. (4) Partnership (partnership); Tourism development must also be carried out jointly between district / city governments and other institutions.<sup>82</sup> One other important element is community participation (participation).<sup>83,84</sup>

Empowerment of communities living in coastal tourism areas through tourism business activities is one of the future tourism development models.<sup>85</sup> Community empowerment is interpreted as an effort to strengthen the power or empowerment of powerless groups of people.<sup>86</sup> Here, the role of the Regional Government as a facilitator can be maximized in the form of facilitating tourism-conscious community groups to get stimulant funds, and so on.<sup>87</sup> In the process of developing tourism, the community must be

---

<sup>77</sup> Pratama, A., Minin, D., & Isnaini, I. (2019). *Op Cit.*

<sup>78</sup> Jumali, J., Farhan, N., Razma, O., Amalia, N. F., & Sudarmiati, S. (2017). *Op.cit.*

<sup>79</sup> *Ibid.*

<sup>80</sup> Pratama, A., Minin, D., & Isnaini, I. (2019). Tinjauan Yuridis Peranan Pemerintah Daerah Dalam Mewujudkan Pemerintahan Yang Baik Dalam Bidang Perizinan Pariwisata. *ARBITER: Jurnal Ilmiah Magister Hukum*, 1(1), 31-41

<sup>81</sup> <http://disporaparbud.serdangbedagaikab.go.id/> di unduh pada Desember 2019

<sup>82</sup> Jumali, J., Farhan, N., Razma, O., Amalia, N. F., & Sudarmiati, S. (2017). *Op.Cit*

<sup>83</sup> *Ibid.*

<sup>84</sup> Simamora, R. K., & Sinaga, R. S. (2016). *Op.cit*

<sup>85</sup> Jumali, J., Farhan, N., Razma, O., Amalia, N. F., & Sudarmiati, S. (2017). *Op.cit*

<sup>86</sup> *Ibid.*

<sup>87</sup> Simamora, R. K., & Sinaga, R. S. (2016). *Op.Cit*

aware of the natural characteristics and socio-cultural dynamics of the community itself.<sup>88</sup> The development of tourism products can be carried out in stages by local governments in accordance with the community's capacity to view and manage tourism potential into useful products. One of the principles of tourism product development is the learning process from shared experiences.<sup>89</sup> Various approaches can be made to this coastal group, for example ICZM (Intregated Coastel Zone Management).<sup>90</sup> ICZM is an approach that includes the role of the community in the management of coastal areas so that people are responsible for the coastal areas where they live.<sup>91</sup> Another approach that can be developed by local governments in their role in developing coastal tourism is ABCD (Asset Based Community Development), where this approach is appreciating and mobilizing individual and community talents, skills and assets (rather than focusing on problems and needs).<sup>92</sup> This approach makes coastal tourism without pollutants the main thing considering that the community will consider environmental sustainability for the sustainability of future welfare.

#### **4. Conclusions and recommendation**

The conclusions of this study are (1) Marine pollution caused by tankers has never occurred in Medan City and Serdang Bedagai District. Pollution that occurs in both Kortas / Districts that have coastal tourism are household waste, livestock manure, wood or tree trunks and branches, reptiles such as dead lizards. In general, the pollution that occurs is felt by the management of tourist attractions has no impact on the implementation of coastal tourism in Medan City and Serdang different districts. (2) The Medan City Government and the Serdang District Government, in this case the tourism office, have not played a maximum role in developing the coastal tourism area which is free from pollution. This can be seen from: (a) until 2019, beach tourism objects in Medan and Deli Serdang are managed by private or private parties, none of which are managed by the local government. (b) Local governments receive tax only. (3) Only Medan City has a Regional Regulation on Tourism, while Serdang Bedagai District does not.

As a recommendation, (1) District / city governments play an active role in preventing coastal pollution such as garbage and other land-based pollutants through the 3R community empowerment program (reduce, re-use and re-cycle). (2) The regional government can manage coastal tourism objects in the city of Medan and Serdang Bedagai district so that the results of coastal tourism can be maximized for the welfare of the community.

#### **ACKNOWLEDGMENT**

We would like to thank the Research and Service Institute of Universitas Sumatera Utara who supported the authors to implement research program through TALENTA Universitas Sumatera Utara research scheme of Fiscal Year 2019 based on the Rector Letter Number:4167/UN5.1.R/PPM/2019

---

<sup>88</sup> *Ibid.*

<sup>89</sup> *Ibid.*

<sup>90</sup> Mariana, K. (2016). *Op.Cit*

<sup>91</sup> *Ibid.*

<sup>92</sup> Mathie, A., & Cunningham, G. (2003). From clients to citizens: Asset-based community development as a strategy for community-driven development. *Development in practice, 13*(5), 474-486.

## References

- Akbar Fitrah Dermawan, Arief Suroso, Haryo Dwito Armono. 2013. *Beach Recreational Index untuk Pantai-Pantai di Kabupaten Serdang Bedagai, Sumatera Utara*. Jurnal Teknik Pomits. Vol 2, No.2. <https://media.neliti.com/media/publications/154326-ID-beach-recreational-index-untuk-pantai-pa.pdf>
- Bambang Pramudyanto, "Pengendalian Pencemaran dan Kerusakan di Wilayah Pesisir", Jurnal Lingkar Widyaiswara, Edisi 1 No. 4, Oktober-Desember 2014, hlm. 21-40  
<http://bappeda.sumutprov.go.id/index.php/potensi-daerah/141-aspek-geografi-dan-demografi>
- Hutasoit, N., Harlen, H., & Harahap, A. (2017). *Pengaruh Jumlah Kunjungan Wisatawan Mancanegara dan Jumlah Hunian Hotel terhadap Penerimaan Sub Sektor PDRB Industri Pariwisata di Provinsi Sumatera Utara Tahun 2004-2013* (Doctoral dissertation, Riau University)
- Indirawati, S. M. (2017). Pencemaran logam berat Pb dan Cd dan keluhan kesehatan pada masyarakat di Kawasan Pesisir Belawan. *JUMANTIK (Jurnal Ilmiah Penelitian Kesehatan)*, 2(2), 54-60.
- Jumali, J., Farhan, N., Razma, O., Amalia, N. F., & Sudarmiati, S. (2017). Peran Pemerintah Daerah Dalam Mengoptimalkan Penanganan Pencemaran Lingkungan Di Wilayah Pesisir Kota Batam. *Jurnal Selat*, 5(1), 25-35.
- Khomsin, K., & Simatupang, R. S. (2016). Penentuan Batas Pengelolaan Wilayah Laut Daerah Antara Provinsi Jawa Timur dan Provinsi Bali Berdasarkan Undang-Undang Republik Indonesia Nomor 23 Tahun 2014. *Geoid*, 12(1), 83-88.ficzms
- Mariana, K. (2016). Pemberdayaan Masyarakat Pesisir Pantai Melalui Pendekatan Iczm (Integrated Coastal Zone Management). In *Prosiding Seminar Nasional Multi Disiplin Ilmu & Call for Papers Unisbank*
- Mathie, A., & Cunningham, G. (2003). From clients to citizens: Asset-based community development as a strategy for community-driven development. *Development in practice*, 13(5), 474-486.
- Muharuddin, M. (2019). Peran Dan Fungsi Pemerintah Dalam Penanggulangan Kerusakan Lingkungan. *JUSTisi*, 5(2), 97-112
- Natalia, M., & Alie, M. M. (2014). Kajian Kemiskinan Pesisir di Kota Semarang (Studi Kasus: Kampung Nelayan Tambak Lorok). *Teknik PWK (Perencanaan Wilayah Kota)*, 3(1), 50-59.
- Peraturan Daerah (PERDA) tentang Rencana Induk Pembangunan Kepariwisata Provinsi Sumatera Utara Tahun 2017-2025
- Perda Sumut No.5 Tahun 2018 tentang Rencana Induk Pembangunan Kepariwisata Provinsi Sumatera Utara Tahun 2017-2025
- Pratama, A., Minin, D., & Isnaini, I. (2019). Tinjauan Yuridis Peranan Pemerintah Daerah Dalam Mewujudkan Pemerintahan Yang Baik Dalam Bidang Perizinan Pariwisata. *ARBITER: Jurnal Ilmiah Magister Hukum*, 1(1), 31-41
- Purwendah, E. K., & Periani, A. (2019). Implementation of presidential regulation number 83 of 2018 concerning handling of sea was in order to provide protection and preservation of the sea environment for Indonesia. *Ganesha Law Review*, 1(2), 18-37
- Rahma, Nadia Femy & Handayani, Retno Herinawati. 2013. Pengaruh Jumlah Kunjungan Wisatawan, Obyek Wisata, dan Pendapatan Perkapita Terhadap Penerimaan Sektor Pariwisata Di Kabupaten Kudus. Volume 2. ISEP Fakultas Ekonomi. Universitas Diponegoro

- Retnowati, E. (2011). Nelayan Indonesia dalam pusaran kemiskinan struktural (perspektif sosial, ekonomi dan hukum). *Perspektif*, 16(3), 149-159.
- Simamora, R. K., & Sinaga, R. S. (2016). Peran pemerintah daerah dalam pengembangan pariwisata alam dan budaya di Kabupaten Tapanuli Utara. *JPPUMA: Jurnal Ilmu Pemerintahan dan Sosial Politik UMA (Journal of Governance and Political Social UMA)*, 4(1), 79-96.
- Sirait, M., & Pinem, M. (2019) Analisis Pengembangan Potensi Obyek Wisata Pantai Di Kabupaten Serdang Bedagai. *Jupiis: Jurnal Pendidikan Ilmu-Ilmu Sosial*, 11(1), 29-45.
- Suhaidi and Rosmalinda and Arif . (2020), Legal Protection for Coastal and Marine Activities from Pollution of the Marine Environment, Proceedings of the International Conference on Law, Governance and Islamic Society (ICOLGIS 2019), 175-178; <https://doi.org/10.2991/assehr.k.200306.207>
- Suhaidi, Arif, Rosmalinda, Laporan Hasil Penelitian Akhir, Perlindungan Hukum Aktifitas Pantai Terhadap Pencemaran Lingkungan Laut (Studi: Lingkungan Laut Di Kota Medan Dan Kabupaten Serdang Bedagai), 2019; Unpublished.
- Suhaidi, Sutiarnoto, & Azam, S. (2019). *Legal Protection For North Sumatra East Coast Fishermen In The Indemnification Of Malacca Strait Oil Spill. Journal of Legal, Ethical and Regulatory Issues*, 22(2), 1-7. Retrieved from <https://search.proquest.com/scholarly-journals/legal-protection-north-sumatra-east-coast/docview/2238481326/se-2?accountid=50257>
- Sumut dalam Angka 2020, <https://sumut.bps.go.id/publication/2020/04/27/317f98717fcca50650c40477/provinsi-sumatera-utara-dalam-angka-2020.html>
- Tanjung, M. R., & Kurniawan, H. (2017). Sistem Informasi Geografis Objek Wisata Alam Di Provinsi Sumatera Utara Berbasis Mobile Android. *IT (Informatic Technique) Journal*, 4(2), 149-162.
- Undang-Undang Dasar 1945
- Undang-Undang Nomor 17 Tahun 2007 tentang Rencana Pembangunan Jangka Panjang Nasional Tahun 2005-2025
- Undang-Undang Nomor 10 Tahun 2009 tentang Kepariwisata
- Undang-Undang Nomor 32 Tahun 2014 tentang Kelautan
- Undang-Undang Nomor 2 tahun 2015 tentang Pemerintahan Daerah
- Undang-Undang Nomor 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup
- Waddell, S. (2009). Rising to the challenge of providing legal protection for the Indonesian coastal and marine environment. *Indonesia Beyond the Water's Edge: Managing an Archipelagic State*, eds R. Cribb and M. Ford (Singapore: Institute of Southeast Asian Studies (ISEAS)), 172-194. (Buku-hanya buka online)
- Widyastuti, A. R. (2010). Pengembangan pariwisata yang berorientasi pada pelestarian fungsi lingkungan. *Jurnal Ekosains*, 2(3), 69-82
- Yanto, Nur. (2014). *Memahami Hukum Laut Indonesia*. Mitra Wacana Media, Jakarta.
- Zebua, Y., Wildani, P. K., Lasefa, A., & Rahmad, R. (2017). Faktor Penyebab Rendahnya Tingkat Kesejahteraan Nelayan Pesisir Pantai Sri Mersing Desa Kuala Lama Kabupaten Serdang Bedagai Sumatera Utara. *Jurnal Geografi*, 9(1), 88-98