

Public Participation in Regulation on the Protection of Marine Resources

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Abstract. This article discusses the significance of participation of the community as an element of control/supervision regarding the conservation of marine resources. This is particularly crucial, considering that Pohuwato Regency, which is located in the Tomini Bay area, is a strategic region with high potential for fishery resources. In addition, the region also boasts beautiful coastal area as well as other marine-related assets such as coral reefs and mangroves. As an imminent threat to the region's potentials, the technique of destruction fishing not only impacts to the fishery resources, but also damages the marine ecosystem. Therefore, public participation is of significance to maintain the sustainability of marine and coastal resources. The research was conducted using an empirical juridical approach. The data collection technique was carried out through a process of interviews and focus group discussions with various relevant stakeholders as determined purposefully. Moreover, a descriptive method was employed to analyze the data. The results show that the existing laws and regulations have provided opportunities for the public to participate in monitoring and reporting of any indications of unlawful acts. Several factors are of importance to be highlighted to optimize the public participation. Keywords: Marine Resources, Public Participation, Regulation.

1 Introduction

Indonesia has been designated as an archipelagic State as stipulated in the 1982 UNCLOS convention. The State consists of 17.504 islands and 2/3 of its territory is composed of waters. Such a vast sea territory shows that the potentials for marine resources are a plentiful natural wealth of Indonesia that requires an effective and sustainable management. Among these maritime potentials are the fishery resources. As based on the Food and Agricultural Organization (FAO) data in 2009, the potentials of capture fisheries ranked third globally after China and Peru; moreover, the aquaculture fisheries potentials ranked fourth worldwide after

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China, India and Vietnam. The potentials of capture fisheries in Indonesia soared up to 6.5 million tons with utilization rate of 5.71 tons per year.

The overall potentials of fishery resources in Indonesia up to 9.931 million tons per year. The presence of abundant fishery resources yielded a massive contribution to the national economy and the wealth of the community. This is in line with the man-date of Article 33 Section 3 of the 1945 Constitution of Republic of Indonesia, which mentions that the Earth, water, and natural resources contained therein are controlled by the State, and are utilized as much as possible for the prosperity of the people. Moreover, the Section 4 also mentions that the national economy is organized based on economic democracy with the principles of togetherness, efficiency, justice, sustainability, environmental insight, independence, and by maintaining a balance of progress and national economic unity.

Tomini Bay is an oceanic area with an ecosystem of mangrove forest, corals, small islands, and good circulation since it is traversed by the Indonesian traffic flow and the water flow of the Pacific Ocean and Indian Ocean.

As the largest bay in Indonesia, Tomini Bay has an area of 59,500 km² and covers the territories of three provinces (North Sulawesi, Gorontalo, Central Sulawesi) and eleven cities/regencies. The economic potentials in Tomini Bay had led to the exploitation activities conducted by both small-scale fishers and fishery enterprises.

As one of the regions in Gorontalo that is covered by Tomini Bay area, Pohuwato Regency features plentiful fishery potentials. The capture fisheries production in the region, as based on the data of Statistics Indonesia office in Gorontalo Province, was at 18,579 tons in 2015, and increased to 21,785 tons in 2017. Apart from the fishery resources, the region is also embedded with other marine resources, such as mangrove forest. Such potential marine resources require conservation and protection from unlawful, irresponsible acts. Illegal and destructive fishing are among the activities that inflict damage to the marine ecosystem. To cope with that, the government has formulated several laws and regulations regarding the management of natural re-sources by emphasizing on the notion of sustainability.

The data of Sub-directorate of Law Enforcement, Directorate of Marine and Aviation Police of Gorontalo in 2021 reported six alleged cases of destructive fishing during the period of 2016-2020 in Gorontalo Province. The data, however, do not include unreported cases.

Therefore, the public participation is of significance in the monitoring, since the sea and its marine resources are collectively owned by the State to be utilized for the prosperity of Indonesian people. This article analyzes the importance of community participation in protecting the marine resources. Further, the article elaborates from a legal perspective regarding the role of community in protecting the marine resources in Pohuwato Regency as well as ensuring the sustainability of the maritime potentials in the region.

2 Method

Therefore, the public participation is of significance in the monitoring, since the sea and its marine resources are collectively owned by the State to be utilized for the prosperity of Indonesian people. This article analyzes the importance of community participation in protecting the marine resources. Further, the article elaborates from a legal perspective regarding the role of community in protecting the marine resources in Pohuwato Regency as well as ensuring the sustainability of the maritime potentials in the region.

3 Discussion

3.1 Role of Community in Legal Perspective

The 2012 data from FAO reported that Indonesia sat in second rank of worldwide capture fisheries and in fourth rank of worldwide aquaculture fisheries. Indonesia also ranked second in global seaweed production. The utilization of abundant potentials of marine resources in Gorontalo Province is far from effective. It is indicated by the increased number from time to time. Aside from the fishery resources, the region also features an estimated coastal area of 590 km² and sea area of 50,500 km² with two Fisheries Management Areas (FMAs), i.e., Tomini Bay-Seram Sea and Sulawesi Sea-Pacific Ocean. These FMAs in total have fishery resources potentials of 1,226,090 tons/year (19.5% of the total potential of Indonesia), with only 2.09% utilization rate.

Considering the massive potentials of the focused region, a good management for its sustainability is required and therefore expected to improve the economic level of the fishers community as well as the regional revenue. However, the principles of sustainability are to be integrated thoroughly in the resources management. The national government has formulated several policies to encourage the community participation to prevent the damages to the marine ecosystem from destructive fishing activities. The following are several regulations as the legal basis for a sustainable fishery management:

1. Article 18 of 1945 Indonesian Constitution that regulates the traditional communities along with their traditional customary rights as long as these remain in existence and are in accordance with the societal development and the principles of the Unitary State of the Republic of Indonesia
2. Law No. 31 of 2004 concerning Fishery that regulates that fishery management is required to take into account the traditional law and/or local wisdom
3. Law No. 32 of 2014 that regulates the cultural values preservation, nautical vision, and revitalization of traditional law and local wisdom in maritime sector
4. Law No. 27 of 2007 jo Law No. 1 of 2014 that regulates the local community, indigenous community, traditional community, and local wisdom
5. Regulation of Minister of Home Affairs No. 52 of 2014 as the basis of guidelines of recognition and protection of indigenous communities and traditional communities
6. Regulation of President of Republic Indonesia as based on the Instruction of President No. 15 of 2011 regarding Protection of Fisher Communities that stipulates and grant the authority to the Coordinating Minister of Politics, Law, and Security in providing guarantees of legal certainty and protection for fisher communities, coordinating the steps needed in the context of preventing illegal, unreported, and unregulated fishing, as well as destructive fishing in the management area of the State. By the Instruction, it is expected that the measures taken are rather preventive and supervisory rather than repressive.

The previous regulations are formulated as an acknowledgment of customary law communities, traditional communities, and the existing traditional values which are previously done by the community to meet their daily life and inherit it to the next generations[1]. The community who lives in the area play important roles in implemented the existing values and would result to significant impacts[2]. In this regard, the optimization of the sustainability of marine resources can be done by strengthening existing human resources. Such a conduct can also involve the indigenous communities, traditional communities, and local values

that have long been practiced and recognized for their existence in the community, particularly those who reside nearby coastal areas. Regarding the present study, Pohuwato Regency is also able to implement the policies that focus on reinforcement and protection of marine resources. The Article 6 (Section 2) of Law of Fishery regulates that fishery management for the purpose of capture and cultivation requires to take into account the customary law and/or local wisdom as well as community participation. In other words, the government has opened an opportunity to the development of local wisdom values as the basis of legal policies of protection of marine resources. The government of Gorontalo Province, through the Provincial Regulation No. 4 of 2018 concerning Zoning Plan of Coastal Areas and Small Islands in 2018-2038, has set the stage for the community participation in aspects as follows: 1) monitoring and control (Article 82), 2) reporting or whistleblowing (Article 83), 3) treatment and preservation of the functions of environment and natural resources (Article 90), and 4) community empowerment (Article 91). Viewed from legal and formal aspects, the government supports the community participation in monitoring all resources in the coastal area.

The prevention of misconducts such as fish bombing is of paramount importance, considering the impacts to the environment. Such misconducts are often committed by fishers from outside the region. Overall, the extent of coral reefs damage in Gorontalo is already at 40%. The damage to corals and other coastal resources is mainly due to the human misconducts. Acts such as illegal fishing and destructive fishing are the main cause of the damage. This situation will worsen if no measures are taken to prevent the illegal acts. That said, it will further damage the whole marine ecosystem. In this regard, a comprehensive approach is imminent to resolve the situation

3.2 Public Participation in Protecting Marine Resources by Preventing Destructive Fishing

Community participation is very much needed in maintaining the sustainability of natural resources, including the coastal and marine resources. The coastal community mainly works as fisher. The Article 9 (Section 1) juncto of Law No. 45 of 2009 concerning Amendment of Law No. 31 of 2004 concerning Fishery stipulates that it is prohibited for anyone to own, control, carry, and/or use fishing gear and/or fishing aids that interfere with and damage the sustainability of fish resources in the territory of the Republic of Indonesia, which is punishable by a maximum imprisonment of 5 years and a maximum fine of Rp. 2,000,000,000.00 (two billion Rupiah). The above provision expressly regulates the prohibition accompanied by imprisonment and fines to enforce the law. As a preventive effort, community participation is also very much needed in maintaining the sustainability of existing resources as previously described; however, as based on the interview results, efforts to maximize the role of the community need to pay attention to the following notions:

- a. Coastal community mainly relies on the fishery resources. The income from fish catch is crucial to support the economy of the community. As based on the profile of Bajo Laut village in 2016, 61.35% of the community were fishers. Such a condition might hinder the investigation of destructive fishing activities. There is a tendency to cover each other's' misconducts because of solidarity; in addition, the fishers seek for ways of getting a large number of catches. This could lead to increasing numbers of law violations and unreported criminal acts.
- b. The community can also participate in illegal fishing by reporting any indications of law violations. This is feared to be less effective and backfire because of the sense of kinship and solidarity among fishermen, as well as the unwillingness to involve

themselves in dealing with law enforcement because of fear and not wanting to be ostracized from fishing community groups or family members.

- c. The understanding and awareness of the coastal in maintaining marine ecosystems needs to be improved. Therefore, it is important to explain that marine resources deplete to prevent from over-fishing and other misconducts. Therefore, this program requires the formation of community groups that are pro-environmental sustainability and the implementation of alternative community business assistance programs. Therefore, the socialization of dangers of fish bombs and the law enforcement are to be carried out continuously.
- d. The limited number of law enforcement officers working in the site and inadequate equipment are the main challenges to the activities of operation. Public awareness is needed in assisting the task of law enforcers in the field.
- e. Cooperation between the government and the community in preserving marine resources needs to be continuously improved in maintaining the sustainability of collective resources.
- f. Law enforcement with strict sanctions is one solution in eradicating illegal fishing. However, the use of criminal sanctions needs to be limited only to the level of providing a deterrent effect, and so that others do not do the same.
- g. The supervisory authority by the regencial government, which was transferred to the provincial authority based on Law Number 23 of 2014 has an impact on the implementation of supervision.

The findings show that the protection of marine resources is done by relying on legal solutions. Various factors are to be taken into account. In addition, a multi-factor approach is needed, both through preventive and repressive efforts. Community participation is seen as the effective multi-factor approach to tackle the complex issues of protection of marine resources.

4 Conclusion

The role of the community takes the form of supervision and efforts to preserve marine resources. Public supervision is carried out through the submission of reports and or complaints from the authorities. Based on the results of supervision, the role of the community in conducting supervision needs to pay attention to the following aspects that can promote or hinder the investigation and protection of fishery resources: (1) fishers' entailment of neighbor/family relationship; (2) sense of solidarity among fishers; (3) limited number of apparatus working in the field, (4) use of criminal sanctions, (5) improvement of public awareness, and (6) regencial-wide monitoring.

References

1. Listiyono, Yudi. et. al. (2019). Membangun Kekuatan Laut Indonesia Dipandang Dari Pengawal Laut Dan Deterrence Effect Indonesia. [Building Indonesian Maritime Power based on Indonesia's Sea Guard and Deterrent Effect], *Jurnal Strategi Pertahanan Laut*, 5(1): 73-84. Retrieved from <http://139.255.245.7/index.php/SPL/article/view/651/614>, (accessed June 13, 2020)
2. Putri, Arum Sutrisni. (May 29, 2020) Potensi Sumber Daya Alam Lautan [Potentials of Marine Resources]. Retrieved from <https://www.kompas.com/skola/read/2020/05/29/090000069/potensi-sumber-daya-alam-lautan?page=all> (accessed June 13, 2021)

3. Suman, Ali, et. al. (2016). Potensi dan Tingkat Pemanfaatan Sumber Daya Ikan Di Wilayah Pengelolaan Perikanan Negara Republik Indonesia (WPP NRI) Tahun 2015 Serta Opsi Pengelolaannya [Potentials and Utilization Rate of Fish Resources 2015 in Fisheries Man-agement Area of Indonesian Republic (FMAs) and its Management Options]. *Jurnal Ke-bijakan Perikanan Indonesia*, 8(2): 97-110. Retrieved from <http://ejournal-balitbang.kkp.go.id/index.php/jkpi/article/view/1769/2662>, (accessed June 13, 2020)
4. Gordon, (2005). (dalam Karsono Wagiy, Asep Priatna dan Herlisman, 2019), Kelimpahan , Komposisi, dan Sebaran Larva Ikan di Laut Seram, Laut Maluku dan Teluk Tomini (WPP 715) [Abundance, Composition, and Distribution of Fish Larvae In Seram Sea, Molluca Sea, and Tomini Bay (FMA715)], *Bawal Widya Riset Perikanan Tangkap*, 11(1): 1-17. Re-treived from <http://ejournal-balitbang.kkp.go.id/index.php/bawal/article/view/3367/6405> (ac-cessed June 13, 2020)
5. Suwarso, Sadhotomo B., and Wudianto. (2007). Perkembangan Perikanan Pelagis Kecil di Teluk Tomini: Suatu Pendekatan Ke Arah Managemen yang Bertanggungjawab, [Develop-ment of Small Pelagic Fishery in Tomini Bay: An Approach to a Responsible Management]. *BAWAL* 1(6): 233-244. Retrieved from <http://ejournal-balitbang.kkp.go.id/index.php/bawal/article/view/3873/3328>, (accessed June 13, 2021)
6. Kementerian PPN/Bappenas Direktorat Kelautan dan Perikanan. (2014). *Kajian Strategi Pengelolaan Perikanan Berkelanjutan [A Strategic Study of Sustainable Fishery Manage-ment]*, https://www.bappenas.go.id/files/7614/4401/4206/Strategi_Pengelolaan_Perikanan_Berkelanjutan.pdf (accessed July 15, 2021)
7. www.antara.com. (2012). Kerusakan terumbu karang di Gorontalo mencapai 40% [Damage To coral reefs in Gorontalo reaches 40%]. (accessed December 7, 2013). The news was quoted from the speech of Head of Environment Division of Environment, Research, and Technology of Gorontalo Province. See, Fenty U. Puluhulawa, dkk, 2013, *Pemanfaatan Alat Penangkap Ikan Tradisional Buili Dan Peningkatan Kesadaran Hukum Masyarakat Nalayan Dalam Rangka Perlindungan Sumber Daya Ikan Di Desa Lamu Kecamatan Batudaa Pantai [Utilization of Traditional Fish Trap and Improvement of Legal Awareness of Fisher Com-munity in Protecting Fishery Resources in Lamu Village, Batudaa Pantai District]* (Proposal KKN-PPM yang didanai oleh DP2M Dikti), p. 2.
8. www.Indonesia.go.id. (2007). Perikanan. (accessed April 5, 2009).
9. www.antaragorontalo.com. (2013). DPK Gelar Rakor Penanganan Tindak Pidana Perikanan [DPK Organizes a Coordination Meeting of Law Enforcement of Criminal Acts on Fisher-ies]. Penyampaian Sekretaris daerah Provinsi Gorontalo pada acara dimaksud [Speech of Regional Secretary of Gorontalo Province in the Mentioned Event]. (ac-cessed April 5, 2014).
10. www.Antaraneews.com. (2011). Kapal Perang TNI Angkatan Laut Berpatroli Tangkal Bom Ikan [Indonesian Naval Forces' War Ship Wards Off Fish Bombs]. (accessed April 5, 2014).
11. Profile of Bajo Laut Village in 2016LNCS Homepage, <http://www.springer.com/lncs>, last accessed 2016/11/21.