

ISSN: 2576-5973 Vol. 6, No. 12, 2023

Gorontalo Bay Water Conservation Area Management Strategy

Retlina Sy. Buhanng

Master's Program of Merine Science, Universitas Negeri Gorontalo

Aziz Salam

Master's Program of Merine Science, Universitas Negeri Gorontalo

Sri Nuryatin Hamzah

Master's Program of Merine Science, Universitas Negeri Gorontalo

Abstract: The potential for coastal and small island resources in Gorontalo Province is quite large with the availability of coastal and marine ecosystems in the form of coral reef ecosystems with an area of around 24,084 Ha, mangrove ecosystems spread along the northern coastline and the southern coast covering an area of 16,603.73 Ha., as well as seagrass ecosystems spread across the coast of Tomini Bay and the Sulawesi Sea, covering an area of around 7,750.86. This research is a type of exploratory descriptive research with quantitative and qualitative approaches (mix methods). With the Gorontalo Province marine conservation area being established by the Minister of Maritime Affairs and Fisheries as proposed by the Gorontalo Provincial Government through the the next stages are as stated and regulated in The Minister of Maritime Affairs and Fisheries Regulation concerning Management of Conservation Areas states that conservation areas need to be managed by an institution and the formation of this institution is determined by the Minister or Governor in accordance with their authority. In connection with these conditions, it is necessary to have an institution (organization/institution) that manages marine conservation areas in Gorontalo Province which must be responsive, adaptive and committed to professional team work, which is transparent, participatory, effective, efficient and able guarantee public accountability.

Keywords: Bay Water, Conservation, Gorontalo Province

INTRODUCTION

Geographically, Gorontalo Province is located at coordinates 1210 23'- 1230 43' East Longitude and between 00 19'-10 15' North Latitude. Gorontalo Province has a total coastline length of around 903.7 km which is divided into Tomini Bay along 572.5 km on the south side and the Sulawesi Sea on the north coast along 331.2 km, sea area around 9,638.44 km2 and islands small with 127 islands (BIG, 2021; Gazetter, 2021). Currently there are 5 regencies and 1 city in Gorontalo Province, namely Bone Bolango Regency, Gorontalo, North Gorontalo, Pohuwato, Boalemo and Gorontalo City. Administratively, the land area of Gorontalo Province is around 12,215 km2 (BPS, 2017).

Globally countries agreed to effectively conserve and protect at least 17 percent of inland waters and 10 percent of coastal and marine areas, especially areas that are critical for biodiversity and ecosystem services, conserved through effective and fair, ecologically representative and sustainable management. well-connected protected areas and other area-based conservation measures that are effective, and integrated into wider landscapes and seascapes (Jon C. Day et al, 2015).

Marine Protected Areas are defined by the World Conservation Union (IUCN) as parts of the intertidal or subtidal environment, together with the overlying waters, flora and fauna and other features, which have been reserved and protected by law or other effective means (IUCN- WCPA, 2008). Meanwhile, according to Minister of Maritime Affairs and Fisheries Regulation Number 31 of 2020, it is explained that a Conservation Area is an area that has certain characteristics as an integrated ecosystem that is protected, preserved and used sustainably.

Experience from the implementation of Marine Protected Areas (MPAs) around the world has shown that protected areas provide a variety of benefits including marine ecology by maintaining and restoring biodiversity and by supporting healthy fish stocks, providing social benefits for appreciation and engagement with nature, can provide important economic benefits by supporting sustainable fisheries, tourism activities as well as recreational use of our seas. More fundamentally, the existence of MPAs can help strengthen resilience to the effects of climate change, as well as support the function of ocean ecosystems as a great planetary regulatory system.

Currently, marine conservation areas are very effective, as a tool for managing sustainable fisheries and are urgently needed by every region. There are several reasons to immediately implement effective management of Marine Protected Areas. The first reason is the threat to marine biological resources which could have a negative impact on the economy of coastal communities. The second reason is efforts to make biological natural resources a common property. Meanwhile, the final reason is that there are opportunities for institutional and regulatory roles that better accommodate common interests (IUCN-WCPA, 2008).

Gorontalo Province Maritime Affairs and Fisheries Service as contained in the Gorontalo Province Regional Regulation on the Zoning Plan for Coastal Areas and Small Islands (RZWP-3-K) Number 4 of 2018 and Gorontalo Governor's Decree Number 141/24/IV/2018 concerning Reservation of Coastal Conservation Areas and Small Islands, has reserved a Conservation Area covering an area of 40,517.17 Ha. However, with Law No. 11 of 2020 concerning Job Creation

which states that RZWP-3-K must be integrated with the RTRW and become a single regional regulation, namely the Gorontalo Province Spatial Planning Regulation (RTRW). Based on this, the Gorontalo Province Maritime and Fisheries Service has prepared a Technical Material Document for Coastal Waters and has received technical approval from the Minister of Maritime Affairs and Fisheries Number B.760/MEN KP/VIII/2022 dated 18 August 2022, one of which is a document that changes the area the marine conservation area becomes 159,1269.68 Ha. Changes in area areas are based on. The study has been carried out and included in the Final Document for the Zoning Plan for the Gorontalo Province conservation area in 2021.

In 2022, the Gorontalo Provincial Government through Governor's Letter Number 523/DKP/1271/XII/2017 dated November 6 2022 has proposed the Determination of the Gorontalo Province Marine Conservation Area to the Minister of Maritime Affairs and Fisheries for determination. Based on Regulation of the Minister of Maritime Affairs and Fisheries Number 31 of 2020 concerning Management of Conservation Areas, it states that after 6 (six) months a conservation area is determined by the Minister of Maritime Affairs and Fisheries, it needs to be managed by a government organizational unit.

Marine conservation areas require a systematic planning process, which is carried out before the area management phase is formalized. Management of marine conservation areas creates a process to direct activities carried out by organizations/institutions towards development taking place in the area.

In the context of initiating conservation areas, it is ensured that the role of stakeholders is important so it needs to be considered in management plans for resource sustainability. The management of marine conservation areas 0-12 miles under the management policy of the Regional Government, it is best for the Regional Government to have a management institution at the local level that considers the existence of various stakeholders, especially local stakeholders, to increase the optimization of achieving community empowerment and preserving natural resources in the area as a conservation objective. , program effectiveness that is right on target and budget efficiency in management.

METHOD

This research is a type of exploratory descriptive research with quantitative and qualitative approaches (mix methods). Descriptive research aims (1) to describe the nature of something that was taking place when the research was conducted and examine the causes of a particular phenomenon; (2) to create objects systematically, factually and accurately regarding the facts and characteristics of a particular population or area (Singarimbun, 1987).

DISCUSSION

The marine conservation areas that are the focus of this research are in 3 (three) locations, namely Olele Village, Kec. Kabila Bone District. Bone Bolango, Botubarani Village, District. Kabila Bone District. Bone Bolango and East Biluhu Village, Kab. Gorontalo is located in the waters of Tomini Bay.

The existence of potential coral reef resources, seagrass and biota Protected species such as clams, sea bamboo and dolphins, whale sharks found in the waters around Tomini Bay, Gorontalo Province are the basis for consideration in determining the core zone at that location. Apart from that, the BMKT potential around the Leato waters is also one of the bases for determining the core zone. Based on the core zone criteria, biophysical survey and public consultation, the core zone of the Gorontalo Bay Marine Conservation Area, Gorontalo Province consists of 4 areas, namely (1) the water area around Olele Beach, Bone Bolango District; (2) the water area around Botubarani, Bone Bolango Regency; (3) the water area around East Biluhu Beach, Gorontalo Regency; and (4) the water area around Leato Beach, Gorontalo City.

Conservation, management and development of marine and coastal resources such as those in the Gorontalo Bay Conservation Area is a very complex issue, not only because of the many parties involved and interested, but also because of the status of the existence and ownership of resources (property rights) are general and open (common pool resources), so that no one party can claim the most rights to these resources, except the government.

Thus, the existence and role of existing institutions and parties is very strategic in the utilization and management of regional resources. So far, the existence of institutions, both governmental, private and non-governmental, is very important in the management of Conservation Areas, with varying levels of involvement and roles according to the responsibilities, commitments and resources available. In this research, when respondents were asked about their responses regarding which institution has the authority to manage conservation areas, almost 90% answered that the Gorontalo Province Maritime and Fisheries Service has the authority to manage conservation areas. This is based on the fact that the management of marine space 0-12 miles is the province's authority.

The Regional Original Income Potential Index (PAD) is based on the parameter of the amount of PAD that can be obtained from conservation areas based on the assumption of funding sources in the form of Entrance Tickets, Research Entry Certificates and Education Entry Certificates. This is stated in the Minister of Maritime Affairs and Fisheries Regulation of the Republic of Indonesia Number 47 of 2016 concerning Area Utilization Conservation. Potential sources of PAD in conservation areas can also come from business activities in conservation areas in the form of business permits for providing natural water tourism infrastructure, namely all forms of infrastructure to support natural water tourism activities in the form of tourist piers, floating hotels, floating restaurants and runways/sea planes; (b) provision of facilities and/or rental of equipment and services is a business that provides equipment and guiding services in one business unit such as dive operators, fishing tour operators; (c) placement of other infrastructure is infrastructure other than supporting natural water tourism activities such as floating net cages for cultivation activities, clean water pipes, telecommunications cables and fisheries piers (Permen KP No. 10 of 2021 concerning

Standards for Business Activities and Products in the Implementation of Based Business Licensing Maritime and Fisheries Sector Risks).

A number of publications, in particular IUCN Guideline no. 20 (Borrini-Feyerabend, et al., 2013), provides a comprehensive overview of these principles more broadly in the context of protected areas. Efforts towards effective and fair management of MPAs require a governance system that is effective, inclusive, diverse and dynamic. Decisions must consider both ecological and social aspects of conservation initiatives.

Diverse jurisdictions and conflicting or competing legal mandates of governing bodies are unavoidable and important considerations in achieving and maintaining effective management. The participation of multiple government agencies can complicate communication between all management interests, create new or more complex bureaucracies, and increase conflict and jurisdictional competition between agencies. Adequately fulfilling the rights of all parties, especially indigenous peoples and local communities, can be challenging from a resource perspective, as facilitating these processes requires significant efforts. amount of time, energy and money (Lewis, et al, 2017).

The SO strategy is created based on activities or work programs that will be implemented for the management and development of the KKP, namely by using all strengths to seize and exploit opportunities as much as possible. The WO strategy is determined based on utilizing existing opportunities by minimizing existing weaknesses. The ST strategy uses existing strengths to overcome threats, while the WT strategy is based on defensive activities, meaning it tries to minimize existing weaknesses and avoid threats.

Marine Protected Areas (KKP) are a policy instrument that has the potential to overcome several pressures on marine biodiversity, in particular overfishing and exploitation and destruction of habitat. In addition to protecting rare and threatened species and their habitats and other areas of ecological importance, MPAs can help ensure the sustainable provision of a range of other ecosystem services that are important for human well-being, including fisheries, coastal protection (protecting against storms and erosion), tourism and recreation.

The principle of developing strategies in management and zoning plans for marine conservation areas is to maintain environmental quality in a coastal area. Coastal habitat is the main resource that provides trade services, food sources, recreation and other environmental services. Apart from that, to protect biodiversity, the quality of the marine environment needs to be maintained and also the type of bioavailability. Protecting sensitive environments in conservation areas as a strategy to avoid damage due to development.

CONCLUSION

The results of the research and discussion can be concluded as follows:

- 1. The institutional model for managing marine conservation areas in Gorontalo Province is in the form of a UPTD whose management is partnership-based in accordance with its potential.
- 2. Strategy for managing and developing marine conservation areas in Gorontalo Province in realizing sustainable management of conservation area resources through a human resource management approach, governance through initiating the formation of KKP Management institutions, funding, maintaining and protecting as well as increasing the capacity and quality of the KKP ecosystem through socialization and education to the community, effective implementation of zoning plans and regulations in each conservation area, providing opportunities for the business world and the community to utilize KKP by prioritizing sustainable nature conservation by paying attention to carrying capacity and applicable laws and regulations, increasing the participation of community groups supervision (POKMASWAS), conservation mobilization group (KOMPAK), legal apparatus and enforcers, building telecommunications networks and infrastructure in KKP, building partnership networks for KKP management, increasing Government participation, community and stakeholders in disaster mitigation efforts and Carrying out and improving supervision with the involvement of elements of the apparatus, POKMASWAS periodically in the KKP.

Suggestions that can be given are:

- 1. For educational institutions, in the form of conducting further research regarding the effectiveness of conservation area management if a definitive conservation area management institution has been formed.
- 2. Government agencies recommend that management of conservation areas be based on partnerships to optimize the various resources they have.
- 3. For the general public, effective and continuous outreach is needed so that the benefits and objectives of conservation can be well received

REFERENCES

- Acemoglu, D. 2003. Root Causes: A Historical Approach to Assessing the Role of Institutions in Economic Development. Finance and Development. Vol. 40, no. 2, June: 27-30
- 2. Geospatial Information Agency. 2021. Gazeter of the Republic of Indonesia Edition 1 of 2021. Geospatial Information Agency. Bogor. 858 p.
- 3. Gorontalo Province Central Statistics Agency. 2017. Gorontalo Province in Figures 2017. Catalog 1102001.75
- 4. Borrini-Feyerabend, G., Bueno, P., Hay-Edie, T., Lang, B., Rastogi, A. and
- 5. T. Sandwith. 2014. "A Primer on Governance for Protected and Conserved Areas." in Stream

ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 12 in Dec-2023 https://www.globalresearchnetwork.us/index.php/AJEBM

- 6. on Enhacing Diversity and Quality of Governance, 2014 IUCN World Parks Congress.
- 7. Budhiarsa MP and Peter FH, 2017. Institutional Analysis and Development. Faculty of Public Health, University of Indonesia. 751 p.
- 8. Campbell, Lisa M., and Noella J. Gray. 2019. "Area Expansion versus Effective and Equitable Management in International Marine Protected Areas Goals and Targets." Marine Policy 100(December 2018):192–99.
- 9. Campbell, Stuart J., Andrew S. Hoey, Jeffrey Maynard, Tasrif Kartawijaya, Joshua Cinner, Nicholas AJ Graham, and Andrew H. Baird. 2012. "Weak Compliance Undermines the Success of No-Take Zones in a Large Government-Controlled Marine Protected Area." PloS One 7(11):e50074.
- 10. Gift of Mulya Firdausy. 2017. Policies and Strategies for Increasing Original Regional Income in National Development. Jakarta: Indonesian Torch Library Foundation.140 p.
- 11. Carr-Dirick, B., and U. Klug (2002), "Etude de Faisabilité d'un fonds fiduciaire pour le Parc National du Banc d'Arguin" [Feasibility study of trust funds for the National Park of Banc d'Arguin].
- 12. Day, Jon, Nigel Dudley, Marc Hockings, Glen Holmes, Dan d'A Laffoley, Sue Stolton, and Susan M. Wells. 2012. Guidelines for Applying the IUCN Protected Area Management Categories to Marine Protected Areas.IUCN.
- 13. Day Lewis, N., et al. 2017. Large-Scale Marine Protected Areas: Guidelines for design and management. Best Practice Protected Area Guidelines Series, No. 26, Gland, Switzerland: IUCN. xxviii + 120 pp.
- 14. Directorate of Conservation and Marine Biodiversity. 2022. Data on the area of conservation areas. https://kkp.go.id/djprl/kkhl/page/2023.
- 15. Eklund, Johanna, Lauren Coad, Jonas Geldmann, and Mar Cabeza. 2019. "What Constitutes a Useful Measur of Protected Area Effectiveness? A Case Study of Management Inputs and Protected Area Impacts in Madagascar." Conservation Science and Practice 1(10):1–12.
- 16. Freddy Rangkuti, SWOT Analysis Techniques for Dissecting Business Cases, (Jakarta: PT. Gramedia Pustaka Utama, 2004), p. 20.
- 17. Fandi Tjiptono, Marketing Strategy, Cet. II (Yogyakarta: Andi, 2000) p: 1.
- 18. George R. Terry, Basics of Management, (Jakarta: PT. Bumi Aksara, 1992), p. 64
- 19. Griffin, Ricky W.; (and Michael W. Pustay). 2015. International business: a managerial perspective, 8th ed. Salemba four Jakarta. 319 p.
- 20. Iskandar Wiryokusumo and J. Mandilika, 1982. Collections of Thoughts in Education (Jakarta: CV. Rajawali), 93 pages.

- 21. IUCN-WCPA. 2018. "Applying IUCN's Global Conservation Standards to Marine Protected Areas (MPA)." Delivering Effective Conservation Action through MPAs, to Secure Ocean Health & Sustainable Development. Version 1:4. Juda, L. 1999. "Considerations in Developing a Functional Approach to the Governance of Large Marine Ecosystems." Ocean Development & International Law 30(2):89–125.
- 22. John M Bryson, 1999. Strategic Planning, Yogyakarta: Student LibraryJones, P.J.S., Qiu, W. and De Santo, E.M. (2011). Governing Marine
- 23. Protected Areas: Getting the Balance Right. Technical Report, United Nations Environment Programme. Nairobi: UNEP.
- 24. Decree of the Minister of Maritime Affairs and Fisheries of the Republic of Indonesia No. 37/KEPMEN-KP/2013 concerning Determination of the Protection Status of napoleon fish (Cheilinus undulatus).
- 25. Director General's Decree Number 7 of 2022 concerning Technical Guidelines for the Establishment of Regional Conservation Area Management Organizational Units.
- 26. Marzin Catherine, Dominique B., Frédéric, Amanda B. 2016 Marine Protected Areas and adaptation to climate change: How can MPAs increase climate resilience? IUCN, Gland, Switzerland Copyrigh.52p.
- 27. Minister of Maritime Affairs and Fisheries Regulation Number 47/PERMEN-KP/2016 of 2016 concerning Utilization of Marine Protected Areas. BN.2016 No. 1891, jdih.kkp.go.id.
- 28. Minister of Maritime Affairs and Fisheries Regulation Number 31/PERMEN-KP/2020 of 2020 concerning Management of Conservation Areas. B.N. 2020 No. 1165, jdih.kkp.go.id: 32 p.
- 29. Minister of Maritime Affairs and Fisheries Regulation Number 10 of 2021 concerning Standards for Business Activities and Products in the Implementation of Risk-Based Business Licensing in the Maritime and Fisheries Sector. BN 2021/No 317; regulations.go.id; 4 p.
- 30. Government Regulation (PP) Number 60 of 2007 concerning Conservation of Fish Resources. LN. 2007 No. 134, TLN No. 4779, LL SETNEG: 29 Pages.
- 31. Government Regulation (PP) Number 85 of 2021 concerning Types and Tariffs for Non-Tax State Revenues Applicable to the Ministry of Maritime Affairs and Fisheries. LN.2021/No.188, TLN No.6710, jdih.setneg.go.id: 15 pp.
- 32. North DC. Institutions, Institutional Change and Economic Performance.Cambridge: Cambridge University Press; 1990.
- 33. Murdifin Haming, 2011) Modern Production Management, PT. Earth of Letters, p. 49.
- 34. Government Regulation (PP) Number 60 of 2007 concerning Conservation of Fish Resources. LN. 2007 No. 134, TLN No. 4779, LL SETNEG: 29 p.

AJEBM, Vol. 6, No. 12, Dec 2023

- 35. Government Regulation (PP) Number 85 of 2021 concerning Types and Tariffs for Non-Tax State Revenues Applicable to Ministries
- 36. Maritime Affairs and Fisheries. LN.2021/No.188, TLN No.6710, jdih.setneg.go.id: 15 pp. Gorontalo Province Regional Regulation (PERDA) Number 4 of 2018 concerning Zoning Plan for the Coastal Area and Small Islands of Gorontalo 2018 2038. LD.2018/NO.4
- 37. Supriyono, 1998. Strategic Management and Business Policy, Yogyakarta:BPFE-Yogyakarta,), p. 7
- 38. Suwarsono Muhammad, Government Strategy, Jakarta: Erlangga, 2012, p. 86. Law (UU) Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments. LN.2022/No.4, TLN No.6757, jdih.setneg.go.id: 100 pp.
- 39. Law (UU) Number 11 of 2020 concerning Job Creation.
- 40. LN.2020/No.245, TLN No.6573, jdih.setneg.go.id: 769 pp