

Effective Management of Gita Nada Conservation Area, NTB Province

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ABSTRACT

West Nusa Tenggara Province has 9 (nine) marine conservation areas that have been determined based on the decision of the Minister of Marine Affairs and Fisheries and managed by the Regional Government, one of which is the Gili Tangkong, Gili Nanggu, Gili Sudak (Gita Nada) Marine Tourism Park and surrounding waters. This study analyzes the inconsistency of the results of EVIKA's assessment with the reality of regional management. The research method used the analysis of EVIKA documents on the Gita Nada conservation area, management reports, monitoring reports and stakeholder interviews. The results show gaps in the institutional, socioeconomic, ecological and infrastructure aspects of regional management. Recommendations include improving the EWIKA methodology, strengthening the management unit's institutions, partnerships with stakeholders, developing outreach strategies and improving the competence of managing human resources in carrying out the tasks and functions of managing conservation areas.

INTRODUCTION

West Nusa Tenggara Province allocates its waters as conservation areas which currently exist as many as 9 (nine) conservation areas determined through the decree of the Minister of Marine Affairs and Fisheries of the Republic of Indonesia covering an area of 182,968.40 ha. There are still around 145,622.14 ha of aquatic areas in NTB Province with reserve status and have been accommodated in Regional Regulation Number 12 of 2017 concerning RZWP3K which has been integrated into Regional Regulation Number 5 of 2024 concerning NTB Provincial RTRW. Thus, the total area of conservation areas allocated by the region is 328,590.54 ha (West Nusa Tenggara Province, 2024).

To find out the extent to which the marine conservation area has been managed effectively, an instrument is needed to measure it. The EVIKA assessment is carried out with a comprehensive approach that includes institutional, socio-economic, ecological and infrastructure management aspects (Hakim et al. 2020). The assessment of the effectiveness of conservation area management will show the level of success and obstacles faced in achieving its management goals, with the identification of various problems, it will be a reference in formulating the ideal management strategy to increase the effectiveness of conservation area management (Nanda Magfiroh et al., 2020). Increasing the effectiveness of conservation area management can be realized through the evaluation of indicators of management success by paying attention to ecological, economic and social aspects (Pelletier et al., 2005).

This research focuses on the Gita Nada conservation area as one of the conservation areas in NTB Province which has been determined since 2018 through the Decree of the Minister of Marine Affairs and Fisheries of the Republic of Indonesia Number 93/KEPMEN-KP/2018 and managed by the Regional Business Service Agency of the Technical Implementation Unit of the Marine Resources and Fisheries Management Agency (BLUD UPTD BPSDKP) Lombok Region. Gita Nada is a combination of the names of three islands, namely Gili Tangkong, Gili Nanggu and Gili Sudak with an area of 21,132.82 ha (Ministry of Maritime Affairs and Fisheries of the Republic of Indonesia, 2018). The success of the management of a conservation area is highly dependent on institutional synergy involving cross-policy coordination and stakeholders, but the challenges of disharmony between central and regional policies, differences in priority determination, lack of coordination and limited capacity at the regional level are obstacles (Buscher and Fletcher, 2020).

The waters around the Gita Nada conservation area have an important role for the local community, ranging from capture fisheries, cultivation to marine tourism which is an economic opportunity for the local community (Witomo, 2019). Efforts to balance ecosystem sustainability and economic benefits are an understanding of economic assessment that is the basis for effective and sustainable resource management (Hilyana et al., 2021).

The problem of this research is the result of EVIKA Gita Nada's assessment which shows the status of "optimally managed" with management conditions that still face various challenges in the field. This study aims to analyze the results of EVIKA's values and actual conditions in the Gita Nada

conservation area and provide recommendations for improving the evaluation system and conservation area management strategy.

THEORETICAL REVIEW

Management of conservation areas

Marine *Protected Area* (MPA) is a protected and managed aquatic area with a zoning system that has the purpose of managing the sustainability of natural resources and the surrounding environment (Government Regulation of the Republic of Indonesia on Fish Resources Conservation, 2007). Then it is clarified through the Regulation of the Minister of Marine Affairs and Fisheries Number 31 of 2020, that a marine conservation area is an area that has certain characteristics as an ecosystem unit that is protected and managed for sustainable use (Regulation of the Minister of Marine Affairs and Fisheries of the Republic of Indonesia concerning the Management of Conservation Areas, 2020).

The sustainable use of marine conservation areas has strategic relevance to conservation goals and community welfare as two mutually supportive aspects. In the conservation dimension, sustainable utilization ensures the protection of biodiversity, ecosystem function, and the sustainability of natural resources for future generations through an appropriate zoning approach and management of activities according to the carrying capacity of the environment (Witomo 2019). The existence of conservation areas not only has a positive impact on fish resources, but also has an impact on the health of aquatic ecosystems and the welfare of fishermen and residents in coastal areas (Najmi et al., 2020).

Sustainable use of conservation areas

The sustainable use of marine conservation areas must meet three main criteria, namely economically efficient and optimal, social-culturally fair and acceptable to the community, and ecologically maintaining the function and integrity of aquatic ecosystems for future generations (Marasabessy et al. 2018). Coastal and marine areas are areas that have unique and complex characteristics (Bima et al., 2024). The complexity is shown by the condition of coastal and marine ecosystems with various problems faced by user communities and various regional management entities that have different interests and perspectives regarding the utilization and management of coastal and marine resources (Tarigan et al., 2019). The sustainable use of conservation areas must pay attention to the aspect of spatial harmony through the division of preservation and conservation zones, which is 30-50% of the total area, maintaining the ability of the ecosystem to tolerate waste entering the environment so as not to damage existing resources, and ensuring that the use of the area does not exceed the ability of nature to recover itself (Sompotan, 2016).

Challenges of managing conservation areas

Coastal and marine areas are areas that have unique and complex characteristics (Bima et al., 2024). The complexity is shown by the condition of coastal and marine ecosystems with various problems faced by user communities and various regional management entities that have different interests and

perspectives regarding the utilization and management of coastal and marine resources (Tarigan et al., 2019). The conventional approach to natural resource management can be done in two ways, namely *the community-based management* approach and the *state-based management* approach, but currently the two approaches cannot run separately, so it has developed into a co-management and *adaptive co-management* approach) (Tarigan et al., 2019).

Other challenges stem from environmental externalities and poverty as well as low levels of public knowledge that are the root of the problem of coastal environmental damage, such as destructive tourism activities, mangrove logging and fishing with destructive fishing gear (Sanofa et al., 2024).

METHODOLOGY

This study uses a qualitative approach with a gap analysis method to identify the gap between EVIKA's assessment and the management conditions of conservation areas in the field. The research location was carried out in the Gita Nada conservation area, West Lombok Regency, West Nusa Tenggara Province. Primary data was obtained through interviews with various stakeholders, such as conservation area managers (BLUD UPTD BPSDKP Lombok Region), fisheries supervisory community groups (Pokmaswas), *Boatman*, Village Government which is carried out using *Digital Platforms* to accommodate mobility and time limitations. Secondary data was obtained from EVIKA's assessment document for Gita Nada from 2021 to 2024. The assessment was carried out by the EVIKA team appointed by the Ministry of Maritime Affairs and Fisheries by assessing the effectiveness of conservation area management carried out in the previous year.

Gap analysis is carried out by comparing the results of EVIKA's assessment with *real conditions* in the field based on direct verification with stakeholders and observation of the conditions of implementation of the management program.

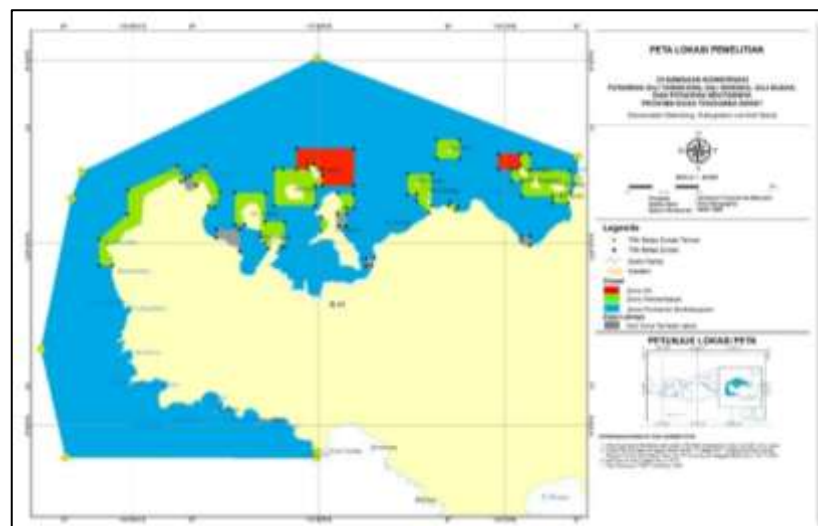


Figure 1. Research Locations in the Gita Nada Conservation Area

RESULTS AND DISCUSSION

The Development of Evika Gita Nada Values

EVIKA's assessment of the Gita Nada conservation area has been carried out since 2021 to assess the effectiveness of area management carried out in the previous year. Until now, EVIKA Gita Nada assessments have been carried out 4 times which have increased in value every year.



Figure 2. Development of Evika Gita Nada Values from 2021 to 2024

Source : (NTB Provincial Marine and Fisheries Service, 2024)

Information : Final evaluation score: <50% (Managed minimum/bronze); >50-85% (Managed sustainable/silver); >85% (Sustainably managed/Gold)

The data presented in **Table 1** shows an increasing trend every year with an average increase of around 8.59% per year. The latest EVIKA value of the 2024 assessment of 2023 management shows a final value of 83.93%, which means that Gita Nada is slightly more to achieve the status of "sustainably managed" with an increase in value from the previous year of 12.59%.

Table 1. Results of EVIKA Gita Nada's 2024 Assessment of Area Management in 2024 2023

Criterion	Total Value	Total Score	Criterion Value (%)	EVIKA Score	Final	Status EVIKA
Input	1055	1075	98	83,93		Optimally managed
Process	385	430	90			
Output	405	650	62			
Outcome	520	625	83			

Source: (NTB Provincial Marine and Fisheries Service, 2024)

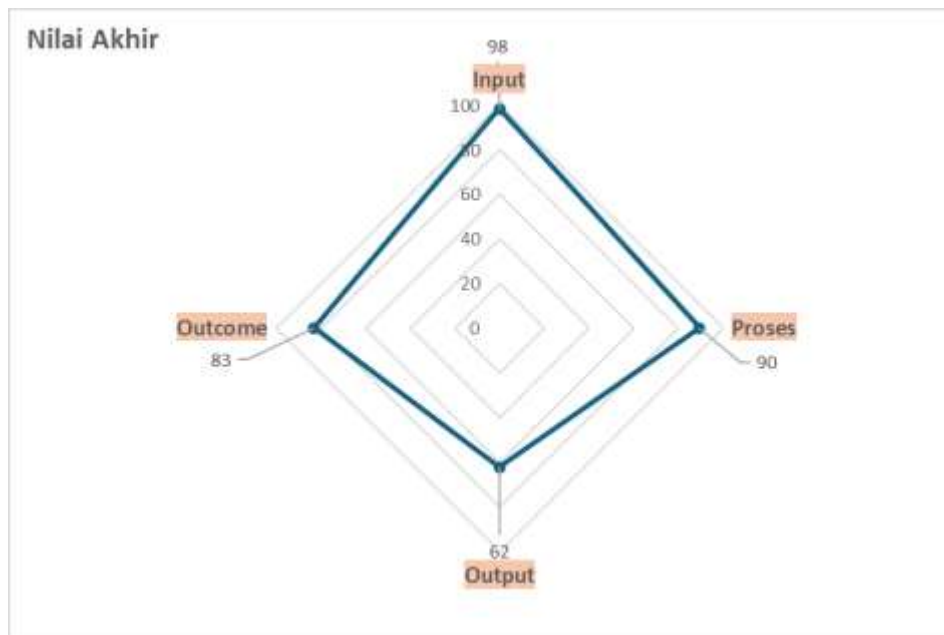


Figure 3. EVIKA Gita Nada Final Score

Gap Analysis Based on EVIKA Assessment Criteria

1. Input criteria

The assessment of input criteria is a stage of assessment of the resources available in managing conservation areas. The results obtained based on **Table 1** show that the value of the input criteria reached a high value with a score of 98%. The establishment of the conservation area management institution in 2023, which was originally a Branch of the Lombok Island Marine Service (CDK) then transformed into the Lombok Region BLUD UPTD BPSDKP and already has an area planning document, provides significant added value to EVIKA's assessment.

Despite receiving high scores, there is a significant gap in implementation in the field, especially related to the limited human resources of regional managers. Based on a study conducted by the Ministry of Maritime Affairs and Fisheries and *Coral Triangle Center* In 2020, that each conservation area requires a minimum of 8 staff (minimum scenario), 11 staff (medium scenario), 17 staff (advanced scenario), up to 20 staff (ideal scenario) (WWF, 2025). The number of managers of the Gita Nada conservation area based on the organizational structure of the BLUD UPTD BPSDKP Lombok Region which is still in effect until now is 13 employees. Thus, the number of new human resources reached the medium scenario based on the study. In addition, BLUD UPTD BPSDKP Lombok Region manages two conservation areas at once on Lombok Island, namely Gita Nada in West Lombok Regency and Gili Sulat-Gili Lawang TWP in East Lombok Regency.

2. Process criteria

In the process criteria, an assessment was carried out on the implementation of routine management activities in conservation areas. Although it scored high overall, its implementation showed some significant limitations in the field. The partnership indicator received a low score (50%) because of the 11 partnership scopes regulated in the Minister of Fisheries

Regulation No. 21 of 2015 concerning Partnerships in the Management of Marine Protected Areas and the Regulation of the Governor of NTB Province No. 37 of 2020 concerning Partnerships and Utilization of Regional Marine Conservation Areas, only a small part of them have been implemented. Active partnerships are currently limited to cooperation with NGOs and supervisory community groups (Pokmaswas).

3. Output criteria

The output criteria showed the largest gap in EVIKA's assessment with a difference of 245 points from the maximum score, especially in the controlled utilization indicator which only reached 10%. Of all the beneficiaries who are active around the Gita Nada conservation area, only a small number have marine space permits and report their activities regularly to the manager.

4. Outcome criteria

In the outcome criteria, a high score was obtained, but the 2023 ecological monitoring data showed that the conservation target of Gita Nada has decreased significantly. Hard coral cover decreased from 29.63% to 22.29% (bad category), down 7.34% from the previous period. Although coral reef fish biomass has increased from 111 kg/ha to 173 kg/ha, this condition is still far from the expected conservation target (Himawan 2023).

Factors Causing Gaps

a. EVIKA's Administrative-Based Methodology

EVIKA's assessment tends to assess the availability of documents, reports and organizational structures without in-depth verification of the field implementation carried out by conservation area managers. This causes the region to get a high score even though the involvement of managers in the field is still limited.

b. Geographic Challenges and Institutional Capacity

BLUD UPTD BPSDKP Lombok Region faces challenges in managing two geographically separated conservation areas in two different districts. This limitation has an impact on the intensity and quality of direct management in the area, ideally 1 conservation area is managed by 1 manager (SUOP).

c. Reliance on Partnership Systems

Although partnerships are an important strategy in conservation area management, over-reliance on NGO support for ecological monitoring and the development of groups and community groups for outreach and monitoring can reduce the role and capacity of managers to lead the management of areas independently and effectively.

CONCLUSIONS AND RECOMMENDATIONS

This study reveals a significant gap between the assessment of EVIKA Gita Nada and the real conditions of managers' involvement in the field. The EVIKA value of 83.93% (optimal status) does not fully reflect the intensity and quality of the direct involvement of BLUD UPTD BPSDKP Lombok Region in regional management. The main gaps include the limited presence of managers in the area,

the implementation of programs that rely on external support, EVIKA's methodology that emphasizes administrative aspects and the conditions of conservation targets that are not optimal. Efforts to increase the effectiveness of Gita Nada management require a holistic approach that includes improving EVIKA's methodology based on field verification, strengthening the capacity of area managers, optimizing strategic partnerships and developing adaptive management strategies.

FURTHER STUDY

Future research needs to expand the scope of analysis by incorporating more detailed socio-ecological variables, including population dynamics, land-use patterns, and environmental pressures arising from local economic activities. This approach provides a more comprehensive picture of human-ecosystem interactions, allowing conservation management directions to be set with greater precision.

Upcoming studies are also encouraged to apply spatial-based analytical methods, integrate high-resolution satellite imagery, and use land-cover change modeling to predict long-term scenarios. Research involving active collaboration between local governments, communities, and conservation institutions will strengthen practical recommendations and enhance the effectiveness of managing the Gita Nada Conservation Area in the future.

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