

# The Role of Government in Management of Coastal and Small Islands in Muna District, Indonesia

La Ode Restele<sup>1</sup>, La Ode Sahaba<sup>2</sup>, La Ode Muh Munadi<sup>2\*</sup>

<sup>1</sup>Department of Geography, Halu Oleo University, Kendari, Indonesia <sup>2</sup> Faculty of Animal Science Halu Oleo University, Kendari, Indonesia

# ABSTRACT

Article Info Volume 9, Issue 2 Page Number : 01-06 Publication Issue : March-April-2022 Article History Accepted : 01 March 2022 Published: 05 March 2022 The study aims to identify the role of the government in the management of coastal areas and small islands in Muna Regency to be carried out in 2021. The study uses a survey method using secondary data related to coastal area management. Thus, the condition of the management of coastal areas and small islands is described, including policies, structuring of coastal areas, and the functions of supervision and law enforcement. Collecting data using a controlled observation method by looking at the phenomena that occur and closed interviews whose implementation uses a questionnaire guide following the variables and objectives to be obtained from the respondents. The results showed that the government's involvement in the management of the Coastal Area of Muna Regency was quite high, both in the preparation of coastal area management plans, implementing program plans, carrying out supervisory and law enforcement functions, monitoring coastal resources, and evaluating management programs.

Keywords : Coastal and Small Islands, Muna Regency

# I. INTRODUCTION

Development of coastal areas in the face of challenges related to socio-economic and natural resources, these challenges can be used as motivation and opportunities. The goal of sustainable development is about the welfare of coastal communities that can be realized. These development challenges include poverty alleviation, increasing economic activity, and controlling environmental problems [1]. These challenges, although seem separate, are closely related to each other and can make it even more difficult to meet other development challenges [2].

Economic activity in the coastal area of Muna Regency is quite developed when compared to economic activity in other areas in Muna Regency because along with increasing economic development in urban areas which are generally adjacent to coastal areas. However, in terms of regional development, coastal areas are often used as suburban areas of an urban area [3];[4]. Although, the region has a functional relationship with

**Copyright:** © the author(s), publisher and licensee Technoscience Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited



the degree of integration between the components of the region in it, however, the development strategy is not appropriate and often creates development inequality between regions [5];[6]. Coastal areas with all the resources contained therein are used as buffers by the poor who are unable to compete in urban areas [7];[8]. The poverty of coastal communities can further lead to more severe environmental damage [9]; [10]. If it is not controlled immediately, it can reduce the overall economic growth of the region [11];[12].

The level of environmental damage in Muna Regency has experienced a moderate level of pollution and is better than the coastal areas of other islands in Indonesia which have experienced high levels of pollution, but in general, the condition of the coastal areas of Southeast Sulawesi is still experiencing low levels of pollution. Environmental degradation factors in coastal areas are the number of poverty rates, urbanization and industrialization, overexploitation, use of fertilizers, pesticides, and herbicides, and other activities [13];[14];[15]. To prevent environmental degradation, a relevant question is raised as the scope of analysis in this study, namely, how is the government's role in coastal management in Muna Regency. To answer this question, it is necessary to identify its various characteristics and problems early. This paper is intended to try to describe the various roles of the government in coastal management in Muna Regency and the direction of development policies that can be carried out.

### II. METHODS AND MATERIAL

The research was carried out in July-August 2021 in Muna Regency, where survey techniques were carried out in coastal areas. The survey technique in the study was carried out by controlled observation and the data collection tool used was a questionnaire that was by the hypothesis to be tested. Furthermore, the data obtained were analyzed descriptively quantitatively. Furthermore, statistical parameters are used to determine the relationship between government policies and community participation with the quality of the coastal and small island's environment. Correlation and regression analysis was conducted to determine the relationship between the two variables. Partial correlation analysis is used to determine the strength of the relationship between the correlation of the two variables where the other variables are considered influential.

### **III. RESULTS AND DISCUSSION**

The government's role in the management of coastal areas and small islands is very essential because all policies, management plans, policy implementation, coastal area management, and the functions of monitoring and law enforcement, resource monitoring, and management evaluation are carried out by the government. This study describes in detail and comprehensively the results of the analysis of the role of the government of Muna Regency in the management of coastal areas and small islands accompanied by an analysis of the relationship between these roles and the knowledge and perceptions of the community on coastal and small island management in Muna Regency.

#### 3.1 Government Role Variable Index

The government's role variable index is obtained from the calculation of the percentage of the government's role in the management of the coastal area of Muna Regency based on the results of the answers to the questionnaire in each indicator.



# Figure 1. Graph of Government Role Index in Coastal Area Management and the Small Island of Muna Regency

Based on Figure 1 it can be seen that the government's involvement in the management of the Coastal Zone of Muna Regency is quite high, at 75 (A1). Activities carried out by the government in the management of coastal areas and small islands in Muna Regency, among others: preparation of coastal area management plans, implementation of program plans, carrying out supervisory and law enforcement functions, monitoring of coastal resources, and evaluation of management programs. The benefits of managing coastal and small islands for the government are very useful with an index of 95 (A2), namely as a livelihood, protecting natural resources, opening access, creating jobs, and enabling interaction with people outside the district. The involvement of the government in the management of coastal and small islands in Muna Regency has an index of 64 (A3) which includes the following activities: (1) Protection of natural resources; (2) development of facilities and infrastructure for ecotourism activities; (3) community empowerment in coastal areas; (4) the provision of licensing services to visitors; and (5) data and information providers.

The percentage index of the government work program of Muna Regency related to the management of coastal areas and small islands of Muna Regency is 68 (A4) with the dominance of the respondents' answers stating that the presentation of government work programs in each sub-district is 41-60% related to the management of coastal areas and islands. small island. The index of the percentage level of government dependence on coastal resources is 68 (A5) with a dominant percentage of government dependence of 41-60% in each subdistrict in Muna Regency. The government's ability to manage coastal areas and small islands in Muna Regency is quite large with an index of 65(B1). The government's ability to manage coastal areas is through education and socialization, opinion, culture, and lobbying capabilities. The government's human resource capacity index to be active in the management of coastal and small islands in Muna Regency is 58 (B2). Government positions that are active in the management of the dominant coastal area are echelon III or village secretary, village head or echelon IV level, and staff or community members in a sub-district.

The percentage of the budget allocated by the government for each sub-district in Muna Regency for coastal area management has an index of 60 with most respondents stating that the percentage of the budget allocated is 41-60% of the total budget. The government's ability to manage coastal and small islands in Muna Regency has an index of 56.7 (B4). The government's ability is seen from the following parameters: (1) the government can supervise the implementation of coastal and small island management programs; (2) the government has facilities for supervision; (3) the government can promote the potential of coastal and small islands; (4) The government can establish relations with fellow governments; (5) the government can attract tourists to visit coastal areas. The government's ability index in providing sanctions for violations in the management and use of coastal and small islands in Muna Regency is 40. The sanctions given to violators are administrative,



financial sanctions (fines), physical sanctions, criminal sanctions, and social sanctions. The low index of this indicator indicates that for sanctions, the government has not implemented it optimally so that violations related to the use of coastal resources still often occur.

3.2 Relation of the Government's Role with Community Knowledge and Perception of Coastal and Small Islands Management Based on the correlation test (X) for the role of government and (Y) for knowledge and public perception, it was found that the relationship between the role of government in the management of coastal areas and small islands in Muna Regency has an Rvalue of 0.407. It can be interpreted that the relationship between the two is balanced.

Regression Statistics					
Multiple R	0,63800	1			
R Square	0,407045				
Adjusted R					
Square	0,34116	1			
Standard Error	4,211781				
Observations	11				
ANOVA		_			
	df	SS	MS	F	Significance F
Regression	1	109,5962	109,5962	6,178226	0,034671193
Residual	9	159,6519	17,7391		
Total	10	269,2481			

### Table 1. Correlation Test Results

Source: Analysis Results, 2020

Next is to determine the level of significance or linearity of the regression. The criteria can be determined based on the F test or the significance value test (Sig). Based on Table 1, the significance value of this study is 0.03. If Sig <0.05 then the regression model is linear. So it can be concluded that there is a significant influence between the role of government and community knowledge and perceptions in the management of coastal areas and small islands in Muna Regency.

# IV. CONCLUSION

The government's involvement in the management of the Coastal Zone of Muna Regency is quite high with the preparation of coastal area management plans, implementation of program plans, carrying out supervisory and law enforcement functions, monitoring of coastal resources, and evaluation of management programs with a significance value of 0.03 or Sig <0.05.

# V. REFERENCES

[1]. A. Leka, A. Lagarias, M. Panagiotopoulou, and A. Strategies, "Development of a Tourism Carrying Capacity Index (TCCI) for sustainable management of coastal areas in Mediterranean islands – Case study Naxos, Greece," Ocean & Coastal Management, vol. 216, p. 105978, Feb. 2022, doi: 10.1016/j.ocecoaman.2021.105978.

- [2]. S. B. Sinay, I. N. Nurjaya, I. Koeswahyono, and M. A. Safaat, "Protection of the rights of indigenous people in the archipelagic province is planning on the management of coastal areas and small islands post of Law Number 11 of 2020 concerning job creation," IOP Conf. Ser.: Earth Environ. Sci., vol. 890, no. 1, p. 012071, Oct. 2021, DOI: 10.1088/1755-1315/890/1/012071.
- [3]. A. R. Farhan and S. Lim, "Improving vulnerability assessment towards Integrated Coastal Zone Management (ICZM): a case study of small islands in Indonesia," J Coast Conserv, vol. 17, no. 3, pp. 351–367, Sep. 2013, DOI: 10.1007/s11852-013-0269-9.
- [4]. M. B. Lane, "Towards integrated coastal management in the Solomon Islands: Identifying strategic issues for governance reform," Ocean & Coastal Management, vol. 49, no. 7, pp. 421–441, Jan. 2006, doi: 10.1016/j.ocecoaman.2006.03.011.
- [5]. W. Lazuardi, P. Wicaksono, and M. A. Marfai, "Remote sensing for coral reef and seagrass cover mapping to support coastal management of small islands," IOP Conf. Ser.: Earth Environ. Sci., vol. 686, no. 1, p. 012031, Mar. 2021, DOI: 10.1088/1755-1315/686/1/012031.
- [6]. A. I. Laturette, R. J. Akyuwen, B. Latupono, A. Anwar, L. O. Angga, and M. A. H. Labetubun, "Natural Resources Management Rights in Land Conservation Areas in Coastal Areas and Small Islands Based on Environmental Sustainability," IJSDP, vol. 16, no. 7, pp. 1309–1316, Nov. 2021, DOI: 10.18280/ijsdp.160711.
- [7]. L. O. Angga, D. R. A. Datie, P. Tuhulele, S. Fataruba, and I. Taufiq, "Responsibility of Manufacturers in Waste Management of Plastic Packaged Drink Products Based on Law Number 18 of 2008 Regarding Waste Management (Case Study in Ambon City, Maluku Province)," IJSDP, vol. 16, no. 2, pp. 327–334, Apr. 2021, DOI: 10.18280/ijsdp.160212.
- [8]. P. D. Doherty et al., "Spatial Ecology of Sub-Adult Green Turtles in Coastal Waters of the

Turks and Caicos Islands: Implications for Conservation Management," Frontiers in Marine Science, vol. 7, p. 690, 2020, DOI: 10.3389/fmars.2020.00690.

- [9]. L. O. Angga and B. Latupono, "Application of Hawear Customary Law in the Prevention of Pollution and Environmental Damage on the Sea Coast in Southeast Maluku Regency," IJSDP, vol. 15, no. 5, pp. 767–744, Aug. 2020, DOI: 10.18280/ijsdp.150519.
- [10]. J. C. K. Huang, "Climate change and integrated coastal management: a challenge for small island nations," Ocean & Coastal Management, vol. 37, no. 1, pp. 95–107, Jan. 1997, DOI: 10.1016/S0964-5691(97)00042-2.
- [11]. C. M. Batista, C. I. Pereira, and C. M. Botero, "Improving a decree-law about coastal zone management in a small island developing state: The case of Cuba," Marine Policy, vol. 101, pp. 93–107, Mar. 2019, DOI: 10.1016/j.marpol.2018.12.030.
- [12]. J. Abrahamsz and Y. Lopulalan, "Socialecological system status and its implications for coastal and small islands management planning in Tanimbar Islands, Maluku Province, Indonesia," IOP Conf. Ser.: Earth Environ. Sci., vol. 348, no. 1, p. 012137, Nov. 2019, DOI: 10.1088/1755-1315/348/1/012137.
- [13]. A. W. Rudiastuti, Munawaroh, I. E. Setyawan, and G. H. Pramono, "Coastal management strategy for the small island: ecotourism potency development in Karimata Island, West Kalimantan," IOP Conf. Ser.: Earth Environ. Sci., vol. 148, no. 1, p. 012013, Apr. 2018, DOI: 10.1088/1755-1315/148/1/012013.
- [14]. O. P. Grey, D. F. S. G. Webber, S. G. Setegn, and A. M. Melesse, "Aplicación de la herramienta de evaluación de suelo y agua (modelo SWAT) en una isla tropical pequeña (Gran Cuenca del Río, Jamaica) como una herramienta en la gestión integral de cuencas y manejo de la zona costera," Revista de Biología Tropical, vol. 62, no. 3, pp.



293–305, Sep. 2014, doi: 10.15517/rbt.v62i0.15924.

[15]. C. Dahl, "Integrated coastal resources management and community participation in a small island setting," Ocean & Coastal Management, vol. 36, no. 1, pp. 23–45, Jan. 1997, DOI: 10.1016/S0964-5691(97)00018-5.

### Cite this article as :

La Ode Restele, La Ode Sahaba, La Ode Muh Munadi, "The Role of Government in Management of Coastal and Small Islands in Muna District, Indonesia", International Journal of Scientific Research in Science, Engineering and Technology (IJSRSET), Online ISSN : 2394-4099, Print ISSN : 2395-1990, Volume 9 Issue 2, pp. 01-06, March-April 2022. Available at doi : https://doi.org/10.32628/IJSRSET22912 Journal URL : https://ijsrset.com/IJSRSET22912