



SUITABILITY OF RESIDENTIAL LAND USE WITH REGIONAL SPATIAL PLANNING ON THE COAST OF WANGI-WANGI ISLAND, WAKATOBI REGENCY

AUTHORS INFO

Sekar Alim Padar
Study Program Urban and Regional Planning,
Faculty of Engineering
Universitas Sulawesi Tenggara
alimpadarsekar@gmail.com

Roland Alexander Barkey
Study Program Forestry, Faculty of Forestry
Universitas Hasanuddin
rolandbarkey@gmail.com

Hazairin Zubair
Study Program Soil Science, Faculty of Agriculture
Universitas Hasanuddin
hazairinzubair@gmail.com

Alim Setiawan
Study Program Aquaculture, Faculty of Fisheries
and Marine Sciences
Universitas Dayanu Ikhsanuddin
alimsetiawan@unidayan.ac.id

Muhamad Fadli Ode
Study Program Geography, Faculty of Mathematics
and Natural Sciences
Universitas Halu Oleo
muhamadfadliode1984@gmail.com

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Abstract

The Bajo Mola Raya settlement on Wangi-wangi Island, Wakatobi Regency, is experiencing development that does not align with spatial planning aspects. This research aims to analyze the development of existing residential land use in the Mola Raya area in accordance with the Regional Spatial Plan (RTRW) of Wakatobi Regency; to identify the factors causing the development of residential land use in the Mola Raya area in accordance with the Regional Spatial Plan (RTRW) of Wakatobi Regency, which consists of external and internal factors. External factors include: (a) population growth; (b) community economy; and (c) community socio-culture, while internal factors consist of (d) supervision; (e) licensing; and (f) enforcement. The method used is the map overlay technique. This analysis begins with the results of on-screen digitization of Google Earth imagery from 2018. Then, an overlay technique was performed with the spatial planning map of the Wangi-Wangi

Island residential area and a descriptive presentation of the results from the FFA analysis, interviews, and FGDs. The results of this study indicate that the development of residential areas not in accordance with the RTRWK is found in Mola Utara Village with a conformity of 76.53% and Mola Nelayan Bakti Village with 76.87% conformity to the spatial planning of the Wangi-Wangi Island residential area. Furthermore, the factors most influencing the development of the Bajo Mola Raya settlement were found to be the increase in population, the economy of the community, and the socio-cultural aspects of the society. The internal factors indicate a lack of supervision, licensing, and enforcement from the local government.

Keywords: Bajo tribe, settlement development, and spatial planning

A. Introduction

Wakatobi Regency is one of the regencies located in the province of Southeast Sulawesi, known for its underwater tourism. Wakatobi Regency is the result of the expansion of Buton Regency in 2003. Since its formation as a regency, Wakatobi has experienced rapid development, as seen in the population growth rate and the development of residential areas. Based on population projections, Wakatobi Regency has experienced an increase, with a population of 96,730 in 2014 and reaching 106,688 in 2018 (BPS, 2018). This condition can encourage the development of residential areas year by year.

Wangi-Wangi Island is the capital of Wakatobi Regency. This island is divided into two districts, namely the Wangi-wangi district with a land area of 241.98 km² and the South Wangi-wangi district with an area of 206.02 km² (BPS, 2018). As the capital of the regency, Wangi-wangi Island has experienced urban physical development characterized by predominantly non-agricultural activities, leaning towards trade, economy, services, and other sectors (Wang, 2006). This development has led to changes in land use (Muji, 2018). Spatial utilization has three objectives, namely the optimization of resource use (productivity), balance and justice (equity), and sustainability (Rustiadi et al., 2011). The area experiencing rapid development and very high residential density is located in the Bajo Mola settlement area.

The Bajo Mola Tribe area, also known as Mola Raya, is located within the administrative region of Wangi-Wangi Selatan sub-district and is divided into five villages: South Mola Village, North Mola Village, Samaturu Mola Village, Bahari Mola Village, and Baktidengan Fishermen Mola Village, covering an area of 36.69 hectares. The increasing development of settlements in this area often does not comply with spatial planning aspects, and many are engaging in reclamation activities to convert areas not designated for settlement into residential land. Therefore, the development of residential areas in Mola Raya, Wangi-Wangi Selatan District, Wangi-Wangi Island, is largely inconsistent with their designated purpose in the Regional Spatial Plan (RTRW) of Wakatobi Regency.

This research aims to analyze the development of existing residential land use in the Bajo Mola settlement area in accordance with the Spatial Planning (RTRW) of Wakatobi Regency, identify the factors causing the development of residential land use in the Bajo Mola settlement area in accordance with the Spatial Planning (RTRW) of Wakatobi Regency for the years 2012-2032, and provide guidance on the suitability of residential land use in the Bajo Mola settlement area in accordance with the Spatial Planning (RTRW) of Wakatobi Regency for the years 2012.

B. Methodology

The type of research is qualitative descriptive research, using a quantitative analysis approach (Sugiyono, 2011). Analyzing the overlay results on the suitability of residential land use with the Regional Spatial Plan (RTRW) of Wakatobi Regency for the years 2012-2032, and to analyze the factors causing the development of residential land use with the Regional Spatial Plan (RTRW) of Wakatobi Regency for the years 2012-2032 using descriptive analysis, as well as the direction of residential land use suitability with the RTRW of Wakatobi Regency using Force Field Analysis (FFA).

The research data consists of primary and secondary data. Primary data collected from interviews related to the factors causing the development of settlements, field survey results to validate image interpretation, and documentation in the form of photos using a smartphone camera. Meanwhile, secondary data includes literature studies/reports related to the general conditions of the research location, population numbers, and the RTRW document of Wakatobi Regency for the years 2012-2032.

Data analysis in this study uses spatial analysis with map overlay techniques using Geographic Information System (GIS) software (Agustina, 2011). This analysis is used to assess the suitability of residential land use in Mola Raya with the Regional Spatial Plan (RTRW) of Wakatobi Regency. The analysis begins with the results of on-screen digitization of Google Earth imagery from 2018, followed by an overlay technique with the spatial pattern plan map of the Mola Raya residential area. For the causes of residential development, a descriptive analysis method is used. This method is based on the results of interviews/assessments and FGDs. FFA analysis begins by setting the main objective, then determining the driving and inhibiting factors with values based on the consensus of FGD participants from the predetermined variables (Widjayanto, 2012).

C. Findings and Discussion

1. Findings

The suitability of existing residential land use in the Mola Raya area in relation to the Wakatobi Regency Spatial Plan (RTRW) can be determined by analyzing the existing residential land use map and the spatial pattern map using the overlay method. The existing settlement map of Mola Raya was obtained from the digitization of Google Earth imagery from 2018 using Geographic Information System (GIS) software (Islamadina et al., 2012). Overlay was performed between the existing settlement map of Mola Raya and the spatial pattern map in the Wakatobi Regency Spatial Planning (RTRW) for the years 2012 - 2032, resulting in the identification of the suitability of settlements and the extent of existing settlements that are appropriate and inappropriate for their designated purposes.

The settlement in Mola Raya is one of the largest land uses, based on the characteristics of its habitation, the Bajo Mola tribe settlement forms a centralized settlement with permanent and semi-permanent house models. The area of the existing settlement reaches 31.00 Ha out of the administrative area of 36.69 Ha. From the overlay of the existing residential land use map in Mola Raya in 2018 with the spatial pattern map of the residential area in the RTRW of Wakatobi Regency for the years 2012 - 2032, the extent of existing residential areas that are appropriate and inappropriate for their intended use can be obtained. The area of land suitability for residential use in Mola Raya is presented in the following table and figure.

Table 1. Suitability of Existing Residential Land Area in Mola Raya Against the Wakatobi Regency Spatial Planning

Num	Village/Subdistrict	Settlement Space Patterns (Ha)	Existing Settlement (Ha)	Suitability (%)
1	Mola Selatan	9,94	8,79	99,99
2	Mola Utara	3,16	4,13	76,53
3	Mola Samaturu	2,94	2,52	99,99
4	Mola Bahari	4,58	3,71	99,99
5	Mola Nelayan Bakti	9,11	11,85	76,87
Amount		29,73	31,00	95,90

Source: 2019 Analysis Results

Table 2. Suitability of Existing Residential Land Area in Mola Raya Against the Wakatobi Regency Spatial Plan

Num	Village	Spatial Pattern	Function of the Area (Ha)	
			Cultivation Area	Protected Forest
1	Mola Selatan	Service Trade	0,40	
		Settlement	8,79	
		Public Service Facilities	0,08	
			9,27	
2	Mola Utara	Special Area	0,01	
		Service Trade	0,17	
		Office	0,01	
		Settlement	4,13	

		Green Open Space	0,01	
		Public Service Facilites	0,33	
			4,66	
3	Mola Samaturu	Service Trade	0,18	
		Settlement	2,52	
		Green Open Space	0,02	
		Public Service Facilites	0,11	
			2,83	
4	Mola Bahari	Service Trade	0,04	
		Settlement	3,71	
		Public Service Facilites	0,11	
			3,86	
5	Mola Nelayan Bakti	Service Trade	0,01	
		Settlement	9,11	2,96
			9,12	2,96

Source: 2019 Analysis Results

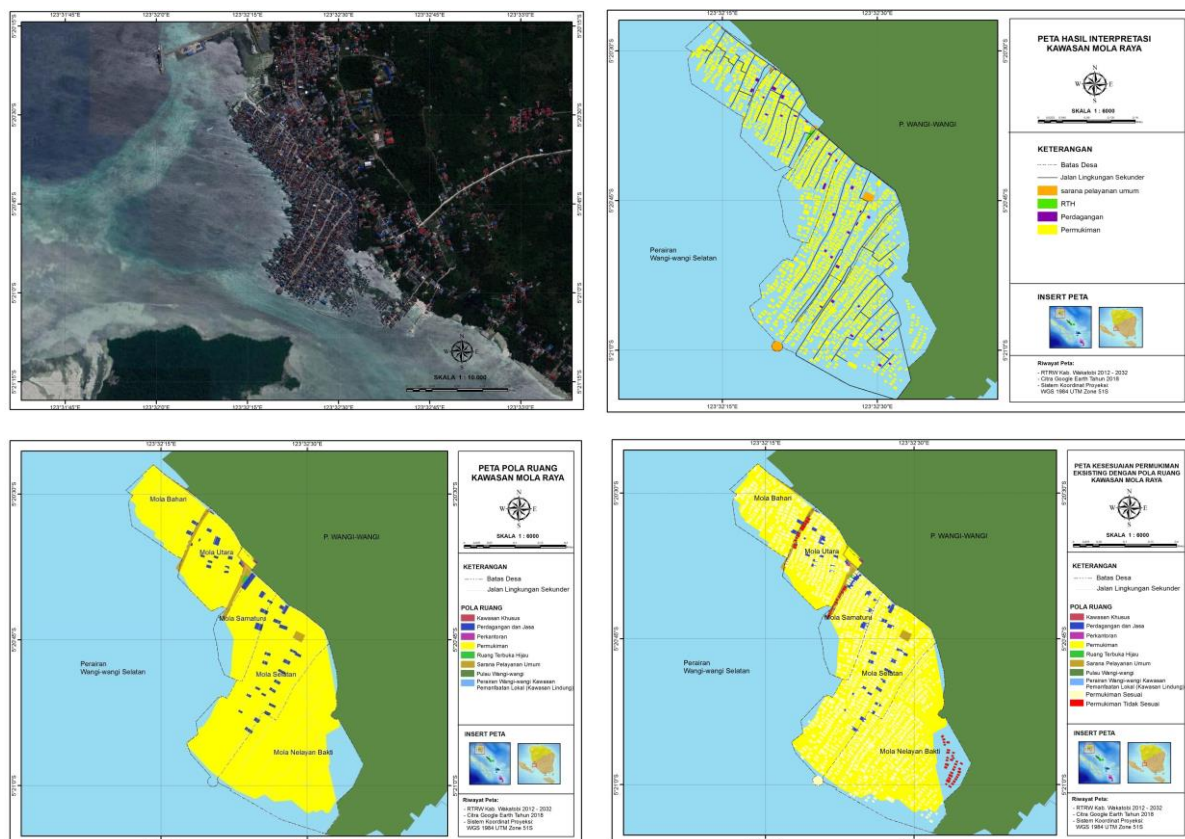


Figure 1. Map of the Suitability of Existing Residential Land in Mola Raya Against the Wakatobi Regency Spatial Plan

Source: Interpretation and Analysis Results 2019

2. Discussion

From the results of overlaying the existing residential land use map in Mola Raya in 2018 with the spatial pattern map of the residential area in the Wakatobi Regency Spatial Plan for 2012 - 2032 The area of land use that does not comply with the RTRW includes Mola Utara Village, with a residential development area of 1.29 Ha in zones not designated for such use, and Mola Nelayan Bakti Village, with an area of 2.96 Ha spreading into protected areas. Desa Mola Nelayan Bakti is the village with the greatest discrepancy between its residential land use and the spatial plan. This is caused by some residents of Desa Mola Raya building houses in the protected area adjacent to the residential cultivation area of Desa Mola Nelayan Bakti. This is due to the land conditions, which still have shallow waters or potential for residential development.

The factors causing the development of settlements are influenced by two factors, namely external factors and internal factors (Zul, 2016). From the results of interviews and FGDs, it was found that the external factor most influencing the need for residential land is population growth, while the economic and cultural factors of the community also affect the development of residential areas in the Bajo community of Mola Raya. while the internal factors are supervision,

licensing, and enforcement as seen from the performance of the government and regional regulation policies.

D. Conclusion

Based on the discussion results, the use of residential land in Mola Raya has developed in Mola Utara Village with a residential area expansion of 1.29 Ha in zones not designated for such use, while in Mola Nelayan Bakti Village, it is 2.96 Ha and spreading towards protected areas. This is influenced by the socio-economic factors of the community, the socio-cultural factors of the community, and the increasing population growth, as well as the need for the government to maximize its performance by implementing permits, supervision, and enforcement in the Bajo settlement area of Mola Raya. Referring to the issue of land use not being in accordance with its intended purpose, it is recommended to make improvements and refinements to the plans outlined in the Wakatobi Regency Spatial Planning 2012-2032 and Zoning Regulations, which still align with current development needs. However, there is a need for enhancements, particularly concerning beach reclamation activities and development activities along the coastline, as well as the rehabilitation/renovation of uninhabitable Bajo tribe houses.

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