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Case Study Article

Assessment of Settlement Quality Levels in Balikpapan Kota Subdistrict, Balikpapan, Indonesia

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Abstract

Balikpapan is experiencing rapid urbanization and has an essential role in settlement development. One of the strategic issues of settlements in Balikpapan is the settlements that have decreased in quality in residential in urban areas with a mild level of slum. Based on the Balikpapan Spatial Plan, the spatial pattern in the Balikpapan Kota Subdistrict is dominated by the Settlement Area. It can be said that the components of settlements are the components that are planned to support settlement activities. Therefore, it is necessary to assess the quality of settlements in the Settlement Area in the Balikpapan Kota Subdistrict. The analysis was carried out by quantitative descriptive method (scoring method) with the unit of study for each settlement block or neighborhood. The analysis results of the quality of settlements in the Balikpapan Kota Subdistrict tend to have reasonable quality settlements. There were no areas that had poor settlement quality values. In the research area, from 131 neighborhoods, 19 neighborhoods still have a moderate quality of settlements. It is necessary to increase several components to improve the quality of settlements in each block so that all settlements become more liveable.

Keywords: Balikpapan Kota Subdistrict; scoring methods; settlement area; settlement quality levels

1. Introduction

Settlement Area is part of the environment that functions as a residential environment and a place for activities that support people's lives (Undang-Undang Republik Indonesia Nomor 1 Tahun 2011 tentang Perumahan dan Kawasan Permukiman). In urban development, the rapidly increasing population growth rate changes the quality level of the residential environment (Yuniawan, 2011). Settlements that experience a decline in quality can be caused by several factors, such as the density of buildings; limited facilities in residential areas that do not conform to standards, building conditions; and environmental problems. These things will decrease the quality of settlements and will be very vulnerable to becoming slum settlements (Salma & Sriyono, 2019). In the National Spatial Planning, Balikpapan is included in the area that functions as a National Activity Centre. Balikpapan is the gateway to East Kalimantan Province and one of the cities experiencing rapid urbanization, where Balikpapan has an essential role in urban development, especially in residential development, to meet the basic needs of its people. In the last five years, Balikpapan has had a population that has increased significantly every year. The population of Balikpapan in 2014 was 605,096 people, and in 2018, there were 645,727 people (Kota Balikpapan dalam Angka 2020). It can be said that the population growth

rate in Balikpapan is 1.34%. The high rate of population growth with the strategic potential in settlement areas will have implications for increasing the need for urban land as residential land, so that increased needs without accompanied by land availability will result in economic consequences, which are increasing land prices and causing low ability to own a house (Rindarjono, 2012; Wilandari & Sulistyarso, 2017). Therefore, it will result in the compaction of buildings in residential areas and further result in slum areas.

The development of a city and the growth of other sectors will considerably impact land-use changes in Balikpapan; from 2009 to 2015, there was an increase in land cover in residential areas in Balikpapan by 13.34% (Juliana, 2014). Based on the Spatial Planning of the City of Balikpapan, the settlement areas in the Balikpapan Kota Subdistrict are the most significant designation compared to other cultivation areas, with a total area of 360 Ha. The issue of settlements in the Balikpapan Kota Subdistrict includes the decline in the quality of settlements in slum areas in urban settlements; This is a challenge for Cities Without Slums or KOTAKU Program following the direction of the Long Term Development Plan in 2005-2025 that concerning zero slum and the regarding residential areas and settlement infrastructure. It is stated in the policy that efforts to prevent urban environmental degradation have not been optimal; Not yet optimal provision and management of infrastructure and urban planning; There are still poor and unemployed people; and the uneven development of housing and infrastructure, facilities, and utilities. In 2019, the Settlement Area of Balikpapan was included in an area with a light slum level and had three villages that have slum areas and one potentially slum village, precisely in Klandasan Ilir Village in residential areas and riverbank, slum settlements in the Balikpapan Kota Subdistrict are included in the Priority Environment scale I. Following previous research, the priority indicator in determining liveable conditions in Balikpapan is the cleanliness of the environment itself, so it is very linear with the existing conditions in settlements in the area. Balikpapan Kota Subdistrict (Annisa & Hiszbaron, 2016).

Many studies explained settlement quality. Putra and Pigawati (2021) described a strong and positive correlation between settlement environmental quality and health condition / respiratory disease. Other studies focused on slum problems deducted by location of settlement (river flood canal, riverside, riverbank, coastal settlement) and can be influenced by natural factors such as climate, terrain, hydrology, vegetation, and human factors such as culture, habit, behavior. (Putra & Pigawati, 2021; Jiaxing, et al., 2021). Podesta & Novira (2020) also explained the quality level of settlement by natural factors using (The geographic Information System) GIS tool. This background research is not analyzed the slum settlement-related the natural/physical aspect, but Balikpapan Kota Subdistrict is in the center of the city. The contribution of this research is not only constructing a settlement quality index but also exploring each indicator to answer the problem of urban center settlements with long-term goals associated with branding. This study aims to assess the settlement quality level in Balikpapan Kota Subdistrict as the urban center settlement in Balikpapan.

2. Methodology

Based on the synthesis of many previous studies, there are 4 (four) indicators for measuring settlement quality. These indicators include building, infrastructure, natural environment, and society (Kustiwan & Ramadhan, 2020; Rofiana, 2015; Setiawan et al., 2017; Rindarjono, 2012; Alfiani & Anisa, 2016). Analysis of the quality settlement was obtained based on field observations or observations of settlement quality variables in Settlement Areas in Balikpapan Kota Subdistrict. Researchers will assess according to the rules of determining the quality of settlement variable in Balikpapan Kota Subdistrict. After observing the area, the scores for each criterion will be classified. Furthermore, all values will be accumulated and classified into three classes of settlement quality.

Table 1. The quality of settlement variables assessment criteria.

Indicator	Variable	Assessment Criteria	Reference
Building	Building Layout	Percentage of regularly arranged buildings of all buildings in the area. If >75% (score 1); 60%-75% (score 2); <60% (score 3) of existing buildings in the area are not arranged regularly.	Kustiwan & Ramadhan, 2020; Rofiana, 2015; Setiawan et al., 2017
	Building Density	The average density of houses or buildings in a residential unit is dense (density > 100 units/ha) (score 1); density 60-100 units/ha (score 2); density > 60 units/ha (score 3).	
Infrastructure	Clean Water Utility	Comparison of the buildings units served by a good clean water utility (clean, odorless, colorless, and tasteless) to the of all buildiings units in the area. >75% (score 1); 60%-75% (score 2); <60% (score 3) of buildings in the area are not served by a good clean water utility.	Kustiwan & Ramadhan, 2020; Rofiana, 2015; Setiawan et al., 2017
	Sanitation Utility	Comparison of the buildings units that are not served by adequate sanitation utility (shown by the presence of private or communal toilets) in the area. There are buildings that do not have private toilets and there are no communal toilets in the area (score 1); There are buildings that do not have private toilets but in the area have communal toilets (score 2); All buildings in the area have private toilets (score 3).	
	Waste Utility	The unavailability of temporary garbage dump on the environmental scale in neighborhood (score 1); Availability of temporary garbage dump but not on the environmental scale of the area or using periodic transportation services (score 2); Availability of temporary garbage dump at environmental scale in the area and well maintained (score 3).	
	Flood	A good drainage utility is indicated by the impact of the existence of environmental drainage itself, whether it causes inundation or flood in the area. Defined by the percentage of inundation or flood area in the area to the total area of the area. >50% (score 1); 25%-50% (score 2); < 25% (score 3) of the area is inundated or flooded.	
	Road Width	The width of the road utility in the fulfillment of settlment area infrastructure must meet the standard of at least 6.5 m. The average neighborhood driveway width is <6.5m (score 1); = 6.5m (score 2); > 6.5m (score 3).	
	Road Pavement	Percentage of damaged roads to the total length of roads in the area. Environmental roads in settlement areas are good and there are no holes or obstacles if they already have pavement such as cement or asphalt. <60% (score 1); 60% - 80% (score 2); > 80% of roads are in good condition.	
	Fire Protection	Availability of environmental-scale fire protection infrastructure such as Light Fire Extinguishers, Pump Cars, Water Hydrant. There is no fire protection	

Indicator	Variable	Assessment Criteria	Reference
		infrastructure (score 1); The existence of one of the fire protection infrastructure (score 2); There are fire protection infrastructure (score 3).	
Natural Environment	Green Open Space	The percentage of green open space in an area is at least 30% of the total area. < 20% (score 1); 20%-30% (score 2); > 30% (score 3) of the area is green open space.	Kustiwan & Ramadhan, 2020; Rofiana, 2015; Setiawan et al., 2017
Society	Population Density	Comparison of the population (people) to the area in hectares. Population density between > 200 people/ha (high and very high population density) (score 1); 151-200 people/ha (medium population density) (score 2); < 150 people/ha (low population density) (score 3).	Rindarjono, 2012; Rofiana, 2015;
	Economic Level	The majority of people's average income in the area is dominated by people with income equal to or above the UMK of Balikpapan is Rp. 3,069.000,- every month. If below the UMK (score 1); is equal to UMK (score 2); above the UMK (score 3).	Rindarjono, 2012; Rofiana, 2015;
	Educational Level	The last education is the average community in a residential area or neighborhood. People in the area on average do not finish elementary school (score 1); People in the area on average have the last education from elementary to junior high school (score 2); People in these areas on average have a high school education or higher (score 3).	Alfiani, 2016; Rofiana, 2015; Setiawan et al., 2017
	Health Level	Classification of incident rate classes is based on the results of calculating the frequency of disease or new cases that are contagious in the community in a place or region at a certain time (generally 1 year) compared to the number of people who may be affected by the disease. Researchers used the condition of the disease that was exposed in the past year, that COVID-19 to measure the incident rate. High class >88 (score 1); Medium class 44,1-88 (score 2); Low class < 44,0 (score 3).	Alfiani, 2016; Priyono et al., 2017; Rofiana, 2015; Adyani et al., 2018
	Social Interactions	The frequency of social interaction as measured by the activities carried out by the Head of the neighborhood in a period of one month. There is no face-to-face meeting between residents within a week (score 1); There are one to two face-to-face meetings between residents within a week (score 2); There were more than two face-to-face meetings between residents in one week (score 3).	Alfiani, 2016; Anisa, 2016; Rofiana, 2015
	Social Group	Availability of social groups in residential areas or neighborhood. There are no social groups (score 1); There are social groups in the community but do not routinely carry out activities (score 2); There are social groups in the community that have regular activities (score 3).	Alfiani, 2016; Rofiana, 2015

The population to be studied in this study is the settlements are in each administrative neighborhood. The researcher observed the quality of settlement variables in 131 administrative neighbourhoods. There is no research sample in this study because the researcher observed the area of settlement quality and aspects of city branding in Balikpapan City. Data collection in this study was obtained from a primary survey and a secondary survey. Primary data were obtained directly by the researcher using an observation form. The researcher will assess the observation form as the executor of the survey on the physical aspects of the research area and address the Head of each neighborhood in the settlement area of Balikpapan City to obtain social and demographic data with supporting data documents for the neighborhoods' profile. Secondary data were collected from relevant agencies or institutions.

In analyzing the settlement quality, quantitative descriptive analysis is used with a scoring method. Descriptive quantitative is a type of research used to analyze data by describing the data that has been collected as it is. The quantitative descriptive method uses correlational study, where the presence or absence of a relationship will be found and how close the relationship is. Based on Table 1, it is necessary to calculate the value of each indicator in the following equation.

$$Yn = n1+n2+\cdots+n16 \quad (1)$$

Where:

Yn = Value of Settlement Quality in the neighborhood n.

n = Score value per-variable.

Table 2. Classification of settlement quality

Grade	Classification
16 – 26	Bad
27 – 37	Moderate
38 – 48	Good

3. Result and Discussion

Balikpapan Kota Subdistrict is one of the subdistricts in Balikpapan Kota which consists of five urban villages, including Prapatan, Telaga Sari, Klandasan Ulu, Klandasan Ilir, and Damai Village. The identified settlement locations are 131 neighborhood units in Balikpapan Kota Subdistrict, as shown on the map in Figure 1.

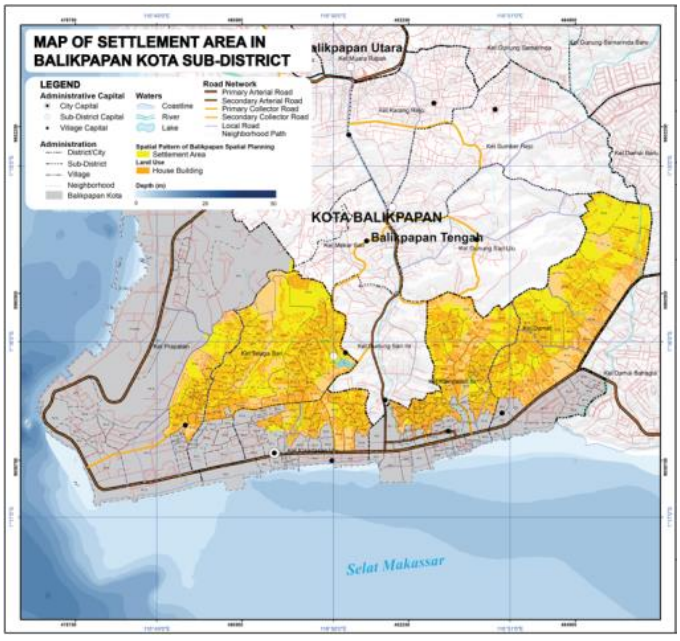


Figure 1. Map of settlement area in Balikpapan Kota Subdistrict.

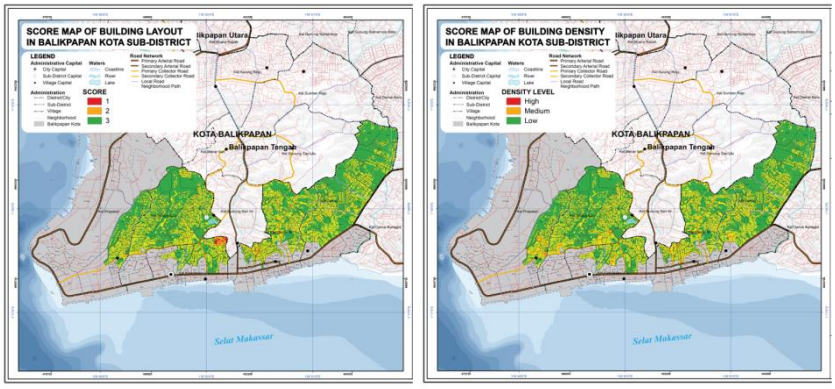
3.1 Scoring of the quality of settlement variables

The following subsection discusses the calculation of each indicator in The Quality of Settlement in the settlement area of Balikpapan Kota Subdistrict.

3.1.1 Building

On the building indicator, two variables are analysed: building layout and building density. The layout of the building is a variable in the quality of settlements, whose value will be seen through the percentage of buildings arranged regularly for all buildings in the area. An environmental road characterizes the standard layout of the buildings in the areas, which causes the area to become more organized. In addition, it can be seen from the buildings that have almost the same area, the same direction, and follow a particular pattern. Practically all research areas have a 3 (three) score, or it can be said to have an orderly area. However, some neighborhoods have a score of 1 (one) or have buildings that do not have good order in their environment. Compared to the number of buildings in the area, it is calculated that the area is orderly. Referring to the 2012-2032 Balikpapan Kota Spatial Plan, 2 urban villages are included in the Balikpapan Kota service center, namely Klandasan Ilir and Klandasan Ulu Urban Village, with the same function as the center of government, trade, and city-scale services. The spatial structure plan affects the level of the orderliness of the building.

Building Density is a variable in the quality of settlements whose value will be seen by comparing the number of buildings (units) with the area (Ha). The Settlement Area of Balikpapan Kota Subdistrict has various building densities, but the entire area or neighborhood has an area that can be said to be not dense, as evidenced by a score of 3 (three). Land use was dominated by the trade and services center. The strategic location is in the downtown area of Balikpapan and on the main road that was always passed by public transportation. The neighborhoods in the trade and service area along the main road corridor affected the residential area, located in the second layer, which causes high building density. The score map of the two variables can be seen in Figure 2.



[a] **[b]**

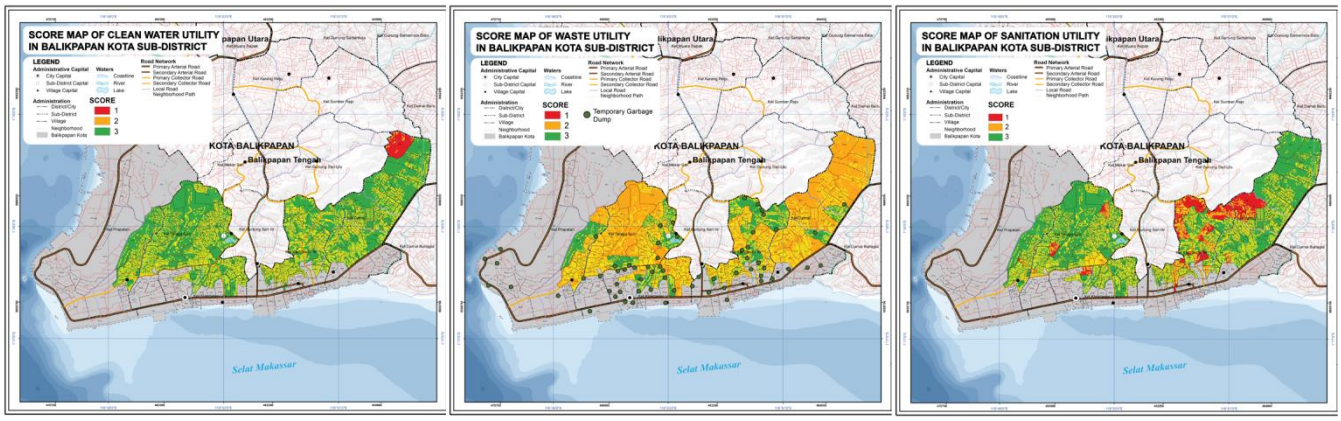
Figure 2. These two figures have been placed side-by-side to save space. [a] Score map of building layout; [b] Score map of building density in settlement area of Balikpapan Kota Subdistrict

3.1.2 Infrastructure

The clean water utility is a variable in infrastructure that be seen through the percentage of the comparison of the number of housing units served by an excellent clean water network (clean, odorless, colorless, and tasteless) to the housing units in the area to determine the percentage of building units that are there is no clean water network served. Based on the analysis, in almost all areas, in the Settlement Area of Balikpapan Kota Subdistrict, clean water utility services have been served based on the analysis of buildings that have not been served with clean water (as evidenced by a score of 3). However, at the 3 (three) score, some houses have still not been served. This is due to several factors in the area, such as the physical condition of the area (topography) so that services do not cover the area

from the Balikpapan Kota Government from the Indonesian regional water utility company. Moreover, still found in the area due to the community's economic condition. Affected communities deal with this by connecting the flow from houses, buying water, and collecting rainwater in large containers such as tubs and deep wells. There is a residential area in neighborhood 38 Damai Village where the buildings in the area do not have regional water drinking company services, so people deal with it by buying water and storing rainwater in large containers such as tubs.

The waste utility is a variable in infrastructure whose value will be seen through the number of temporary garbage dumps in the area. The quality of settlements is adequate, and sound quality is indicated by the availability of well-maintained and well-maintained temporary garbage dump or waste transportation systems in the area. Based on the analysis that each neighborhood has been assessed according to the existing conditions, the number of temporary garbage dumping on each neighbourhood refers to the current scoring criteria. Based on this, the scoring results tend to have a value of 2 (two) and 3 (three) which shows that the Settlement Area of Balikpapan Kota Subdistrict has met the quality of a good waste network. The sanitation utility is a variable in infrastructure whose value will be seen through the housing units served by the sanitation utility, as indicated by the presence of private or communal toilets in the area. The number of sanitations in each neighborhood refers to the existing scoring criteria. Based on that, the scoring results tend to have a value of 1 (one) and 3 (three) where which shows that the Settlement Area of Balikpapan Kota Subdistrict has met the quality of good sanitation utility, but there are still some houses that dispose of waste. Household directly to the drainage channel. There is a settlement area or neighborhood with communal waste management in neighborhoods 27, 28, and 29 of Telaga Sari Village communal household waste management. The score map of the three variables can be seen in Figure 3.

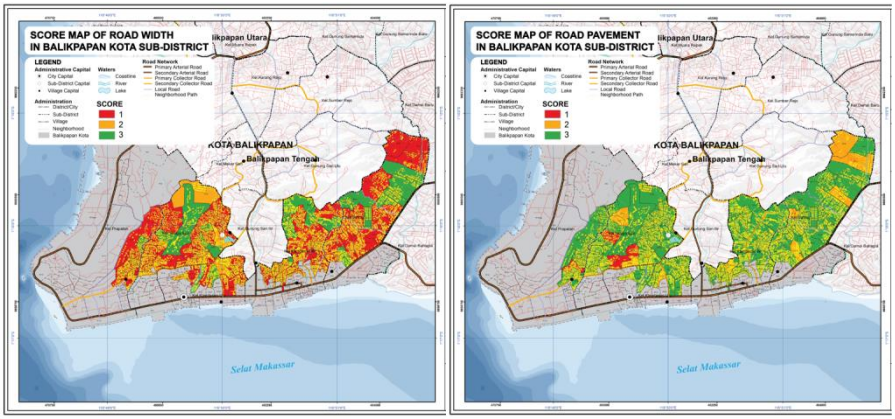


[a] [b] [c]

Figure 3. These three figures have been placed side-by-side to save space; [a] Score map of clean water utility; [b] Score map of waste utility; [c] Score map of sanitation in settlement area of balikpapan kota subdistrict

The width of the road network is a variable in infrastructure whose value will be seen through the width of the road network in fulfilling the infrastructure of residential areas, which must meet the standard of at least 6.5 m. Based on the analysis results, each neighborhood has been assessed according to the existing condition of the road width in each neighborhood, referring to the current scoring criteria. Based on this, the scoring results tend to have a value of 1 (one), where which shows that the Balikpapan Kota Subdistrict has not fulfilled the quality of suitable road widths. The following variable is the road network or road network pavement condition. It is a variable in infrastructure whose value will be seen through the percentage of damaged roads to the total length of roads in the area. Environmental roads in neighborhoods areas are good, and there are no holes or obstacles if they already have pavement such as cement or asphalt. It is to see how significant the percentage of road damage in the area is. Based on the analysis results, the average in the area has a good road network

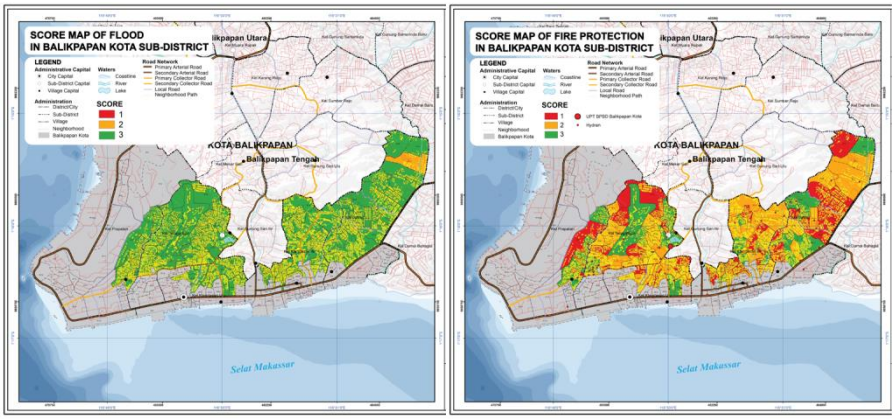
condition, indicated by a score of 3 (three). However, there are still unfavorable road conditions, as indicated by scores of 2 (two) and 3 (three). The score map of the two variables can be seen in Figure 4.



[a] [b]

Figure 4. These two figures have been placed side-by-side to save space. [a] Score map of road width; [b] Score map of road pavement in settlement area of balikpapan kota subdistrict

The drainage utility (inundation or flood) is a variable in infrastructure whose calculation of the effectiveness of the drainage network is based on inundation or flood happening in the area. In almost all areas, there are no inundations, but there are still puddles if there is heavy rain. It causes the drainage network to release runoff and form puddles or flood points in settlement areas. Of the entire area, four Subdistricts in the Balikpapan Kota Subdistrict have inundation in several settlement areas or neighborhoods. The worst condition in the area is in neighborhoods 31 Damai Village. That area has a score of 2 (two). It can be said that 25% - 50% of the area is inundated by inundation or flooding occurs in the area. The next one is fire protection, a variable in infrastructure whose value will be seen through the availability of environmental scales fire protection infrastructure such as Light Fire Extinguishers, Pump Cars, and Water Hydrant. Based on the analysis results, it can be seen that the scoring results tend to have a value of 2 (two) which indicates that the Settlement Area of Balikpapan Kota Subdistrict has not met the quality of the road width, which is quite good. The score map of the two variables can be seen in Figure 5.



[a] [b]

Figure 5. These two figures have been placed side-by-side to save space. [a] Score map of flood; [b] Score map of fire protection in settlement area of balikpapan kota subdistrict

3.1.3 Natural Environment

Green open space is a variable in the natural environment whose value will be seen through the percentage of green open space in at least 30% of the total area. In the Settlement Area in the Balikpapan Kota Subdistrict, it is dominated by a score of 1 (one), or it can be said that the area has an

area of Green Open Space below 20%. The existence of green open space at the environmental scale of a residential area or neighborhood has several functions: the regional public space. In addition to green open space, the area is also dominated by the distribution of vegetation in several neighborhoods. The availability of green open space can be one of the efforts to improve environmental quality. According to Harfadli and Ulimaz (2020), in 2019 and 2024, Balikpapan Kota is classified as approaching a critical condition (50-70%), and conservation of green open space can be one of the prevention efforts. The score map of the variable can be seen in Figure 6.

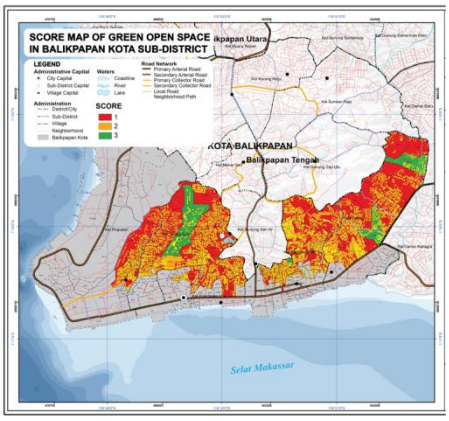


Figure 6. Score map of green open space in settlement area of Balikpapan Kota Subdistrict.

3.1.4 Society

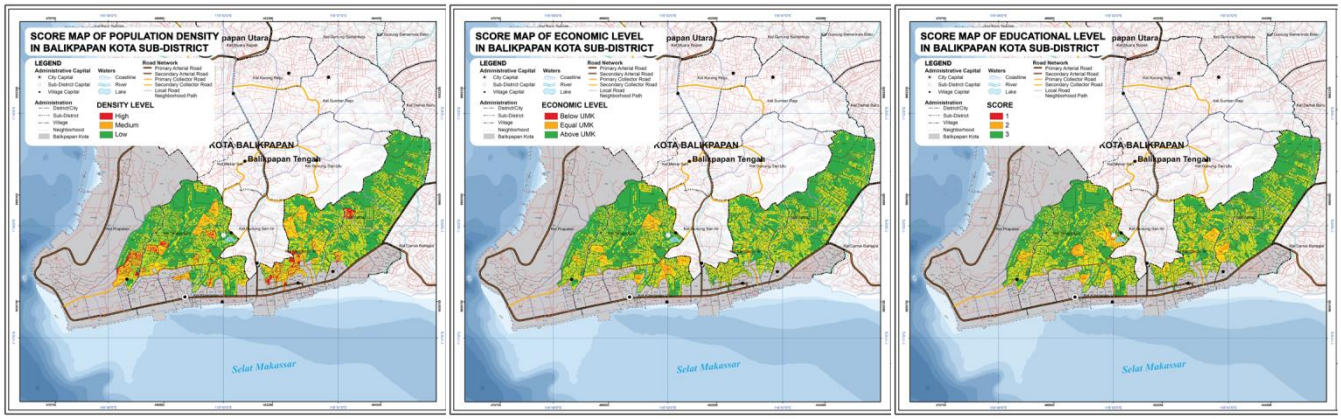
Population density is a variable in a society whose value will be seen through the number of residents against the area in hectares. Based on the analysis results, the scoring results tend to have a 3 (three) value, showing that the Settlement Area of Balikpapan Kota Subdistrict meets good density quality. The economic level is a variable in a society whose value will be seen through most of the community's average income in the area dominated by people with income equal to or above the minimum wage of the Balikpapan Kota of IDR 3,069,000, - every month. Based on the analysis results, all the scoring results have a 3 (three) value, and several households have a score of 2. It shows that the Settlement Area of Balikpapan Kota Subdistrict meets the quality of a sound economic level.

The level of education is a variable in a society whose value will be seen through the last education of the average community in the region. Communities in residential areas in the Balikpapan Kota Subdistrict have taken formal education from elementary, junior high, and high school to undergraduate levels. Of the five villages in the area, it was found that there were areas where there were still many elementary school graduates. Based on the analysis results, all the scoring results have a value of 3, showing that the Settlement Area of Balikpapan Kota Subdistrict meets the quality of a good level of education. The score map of the three variables can be seen in Figure 7.

The level of health is a variable in a society whose value will be seen through the classification of incident rate classes based on the results of calculating the frequency of diseases or new cases that are infectious in the community in a place or region at a particular time (generally one year) compared to the number of people who may be affected by the disease. The class classification for incident rates is obtained by calculating the highest and lowest data from the number of positive COVID-19 sufferers (Period March 2020 - March 2021). Based on the analysis results, the scoring results are dominated by a score of 3 (three), which shows that the Balikpapan Kota Subdistrict meets the quality of a good level of health.

Social interaction is a variable in a society whose value will be seen through the frequency of social interaction as measured by activities carried out by the neighborhood head, such as community service activities or deliberation. Based on the scoring results, all of them have a value of 3 (three), showing that the Balikpapan Kota Subdistrict has a good condition of social relations between its

people based on the intensity of the interactions carried out one month. Social groups are variables in a society whose value will be seen through the availability of social groups in settlements and the activities and social groups. A social group itself is an organization in an area that creates social interaction between communities. In the Balikpapan Kota Subdistrict, social groups consist of Woman Family Welfare Organizations, Religious Groups, and others. Based on the analysis results, all of the scoring results have a value of 3 (three), which shows that the Settlement Area of the Balikpapan Kota Subdistrict meets the quality of good social groups. The score map of the three variables can be seen in Figure 8.

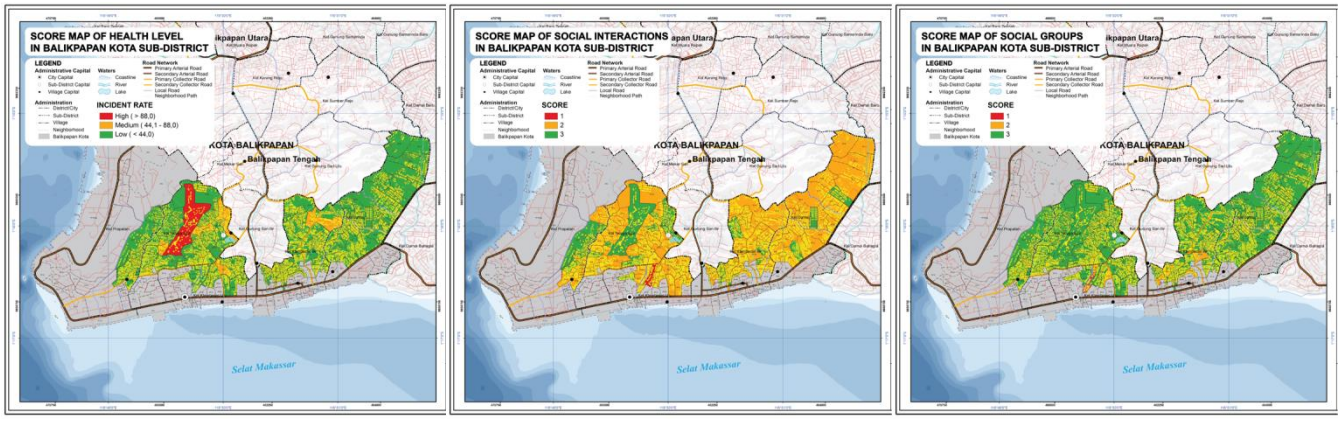


[a] [b] [c]

Figure 7. These three figures have been placed side-by-side to save space. [a] Score map of population density; [b] Score map of economic level; [c] Score map of educational level in settlement area of Balikpapan Kota Subdistrict

3.2. Result of Settlement Quality Analysis

It can be seen that each neighborhood has been assessed according to the conditions of each variable supporting the quality of settlements contained in each neighborhood, referring to the existing scoring criteria. Based on this, it can be seen that the assessment results tend to have good settlement quality. The analysis results are obtained from the total score for each variable. However, there were no areas that had poor settlement quality values. There are still some residential areas or neighborhoods of moderate quality.



[a] [b] [c]

Figure 8. These three figures have been placed side-by-side to save space. [a] Score map of health level; [b] Score map of social interactions; [c] Score map of social groups in settlement area of balikpapan kota subdistrict

It shows that the Balikpapan Kota Subdistrict fulfills a pretty good quality. In the research area, from 131 neighborhoods, 19 neighborhoods, or 15%, still have a moderate rate of settlements (Figure 9).

It is necessary to increase and control several variables still a problem for each residential area or neighborhood. It is stated in the Plan for Prevention and Improvement of the Quality of Urban Slums in Balikpapan Kota in 2017 that the issue of settlements in the Balikpapan Kota Subdistrict includes the decline in the quality of settlements in slum areas in urban areas. It can be said that the research area experienced a decrease in the quality of settlements in several variables on several variables that still needed to be improved.

Table 2. Settlement quality classification

Total Score	**16-26**	**27-37**	**38-48**
Class	Bad	Moderate	Good

Based on previous research, Ulimaz and Jordan (2019) stated that the quality of settlements in water bank settlement in Balikpapan can be measured through the availability of vegetation. Vegetation will increase if the quality of infrastructures such as drainage networks, clean water supply, waste disposal, and solid waste in the affected area by spatially neighboring areas. In addition, it is also supported by the density of social relations between users. (Ulimaz and Jordan, 2019). Meanwhile, in this study, the residential area of Balikpapan Kota Subdistrict with moderate quality status has an area of Green Open Space below 20%. It has the same impact on the infrastructure variable of settlement quality even though it is in the downtown area. In another study, Arung and Ulimaz (2021) also found that physical factors that cause a decrease in the quality of settlements in fishing settlement areas are clean water, roads, solid waste, sanitation, and drainage. This is different from the characteristics of the quality of settlements in the Balikpapan Kota Subdistrict, where most of the physical aspects of the area have been of good value in 86% of the area.

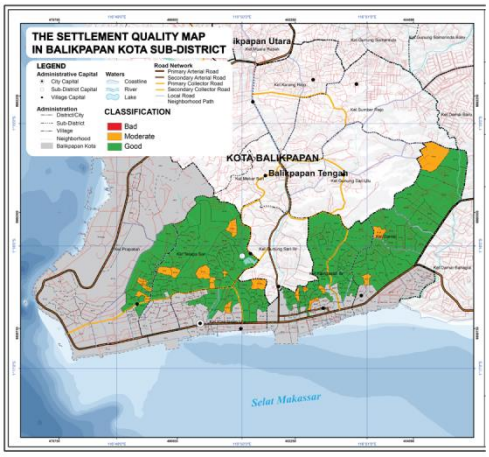


Figure 9. The settlement quality map in settlement area of balikpapan kota subdistrict.

4. Conclusions

This research concludes that the value of Settlement Quality has been analyzed in the Settlement Area of Balikpapan Kota Subdistrict. The results of the assessment tend to have a good settlement quality value. There were no areas that had poor settlement quality values. There are still several settlement areas or neighborhoods of moderate quality, with 19 neighborhoods. It shows that the Settlement Area in the Balikpapan Kota Subdistrict meets pretty good quality. This research can be one of the considerations in determining the development strategy and development of urban settlement areas that have decreased the quality of settlements with a branding approach. Some areas in the research area experience the quality of settlements classified as moderate/light slums, so the government needs to be inclusive to implement appropriate policies and optimize policies for developing residential areas. This research uses a case study of the residential regions in the urban

center of Balikpapan Kota. Future research method needs to be adjusted to the branding potential to assess the quality of settlements in the area to be researched or developed.

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