# Analysis of Resource Needs in South Banjarmasin District of Banjarmasin City

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#### ABSTRACT

This study aims to project and analyze facility needs in South Banjarmasin Subdistrict, Banjarmasin City. The need for adequate and efficient facilities has a significant impact on people's daily lives and also has the potential to affect the economic growth and development of this area. Therefore, a comprehensive analysis is needed to identify the main needs that should be accommodated by public facilities and infrastructure. The research method used is a quantitative research method with an indepth and comprehensive approach. The analysis used is to conduct a projection and analysis of facility needs. The hope is that this research will provide options for the Banjarmasin City government on facilities that need to be added to support community activities in South Banjarmasin Sub-district. The results show that there is a shortage of facilities for education, worship (especially mosques), health (such as posyandu and community treatment centers), and green open spaces (including playgrounds and cemeteries). These findings can serve as a basis for the government of Banjarmasin City in making policies and allocating appropriate resources to meet the needs of the facilities required by the community in South Banjarmasin Subdistrict.

**Keywords:** facilities; needs; population projection; analysis; South Banjarmasin.

# INTRODUCTION

Population development and means have a close relationship (Nurhidayani et al., 2018; Munawir et al., 2021). Rapid and sustainable population growth requires the development of adequate means to meet their needs (Kadarisman et al., 2016). On the other hand, the development of good and quality facilities can encourage population growth and development (Raharti et al., 2020; Kadarisman et al., 2016; Munawir et al., 2019). The development of the population and the means affect each other and require equal attention in the development process (Munawir et al 2022c). By maintaining a balance between population growth and resource development, it is hoped to create a comfortable and quality environment for the community. When the condition of facilities and infrastructure in one country is lacking, this indicates that the economy in that country is running inefficiently. Distribution costs are very expensive, impacting an industry that lacks competitiveness. Apart from that, the emergence of social injustice, such as some people having difficulty accessing health facilities, or children not being served by educational facilities, indicates that the country is still in the process of developing. The development of facilities and infrastructure with economic development should have mutual interactions because it will lead to economic expansion through a multiplier effect.

Improvement of means is an important element in the development of a country (Suhandi dan Wiguna, 2021). There are several reasons why this is very necessary. First, the development of facilities to support economic growth, where good and quality infrastructure spurs economic growth in a region. With adequate infrastructure such as roads, bridges, ports and airports, the mobility of goods and services becomes smoother, and connectivity between regions becomes stronger. Second, the construction of facilities aims to increase accessibility. Adequate infrastructure development increases people's access to various public services such as education, health and transportation. With good facilities, people can more easily and quickly access various important facilities. Furthermore, the construction of facilities also contributes to improving the quality of life of the

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community. For example, with an adequate clean water treatment and sanitation system, the quality of public health improves and the risk of disease is reduced. Apart from that, the construction of facilities also encourages equitable development, so that the benefits can be felt by all levels of society. A city should provide health, education, and religious facilities that are easily accessible to all walks of life, allowing various circles of residents to gather and interact, especially with population growth encouraging the emergence of social facilities in the vicinity (Rumengan et al., 2019). Finally, good infrastructure can also help reduce the impact of natural disasters and increase people's resilience to disasters, especially the impacts of climate change (Munawir et al., 2022a).

Means refer to any form of tool, facility, or infrastructure designed to meet various needs and facilitate the implementation of various activities or services. Means can include diverse elements such as buildings, vehicles, equipment, or other resources used in various contexts. According to Indonesian National Standards (SNI) 03-1733-2004, the categories included in the district means criteria involve various important aspects. These include means of government and public services, means of education and learning, means of health, means of worship, means of trade and commerce, means of culture and recreation, as well as means of open space, parks, and sports fields (Indonesian National Standard, 2004). All these categories have a significant role in shaping the quality of life and services for the community at the district level.

South Banjarmasin District is one of the administrative areas that has an important role in Banjarmasin City. As a center of economic, educational, social, and cultural activities, South Banjarmasin District hosts thousands of residents and various types of businesses that contribute to the growth and development of this region. In addition to its positive potential, South Banjarmasin District is also faced with a number of challenges that must be overcome in order to ensure the quality of life of its people. In recent years, South Banjarmasin District has experienced a significant increase in population growth, caused by urbanization, migration, and natural population growth. According to the 2023 BPS data, the population reached 167,928 inhabitants with a population density of 4,355 inhabitants per square kilometer. Compared to 2022, there was an increase of 2,219 inhabitants, with the number of inhabitants in that year reaching 165,709 inhabitants and the population density being 4,324 inhabitants per square kilometer. As a result, the demand for public facilities and infrastructure in this district also increased exponentially. In this context, understanding the need for critical means such as transportation, education, health, and other common means becomes very important. The need for adequate and efficient means has an impact on people's daily lives and has the potential to affect the growth and economic development of the region. In order to ensure that these needs are met, a thorough analysis is required to identify the main needs that must be accommodated by public means and infrastructure.

The main purpose of this study was to identify and understand the need for the necessary means in the area of South Banjarmasin District. Through the application of quantitative research methods, the study will use an in-depth and comprehensive approach to explain existing phenomena. The objectives of the research also include the projection and analysis of the needs of the means in the region. Thus, the study aims not only to understand current needs, but also to forecast and analyze future needs. The main contribution of the study is expected to provide valuable information to the municipal government of Banjarmasin. This information will help the government in planning and completing the necessary means to support various community activities in South Banjarmasin District.

## RESEARCH METHODS

This research on resource needs analysis in South Banjarmasin District applies a type of quantitative approach, a method that focuses on the analysis of data expressed in the form of figures and can be measured statistically (Wahjoerini et al., 2022). Data collection techniques are carried out using surveys observations and review of documents. To analyze the data obtained that is, by using projection analysis and analysis of the needs of qualitative-quantitative means. This analysis refers to an approach that uses both qualitative and quantitative data to perform a comprehensive analysis of the phenomenon under study.

Qualitative data is a type of data that describes and explains the characteristics and meaning of the phenomenon under study. This data consists of narratives, words, images, or documents resulting from interviews, observations, or analysis of documents. While quantitative data is a type of data in the form of numbers or measures that can be measured numerically. This data reflects the number, frequency, scale, or proportion of a variable in the study (Munawir et al., 2022b).

## **Projection Analysis**

Population projection analysis is the process of estimating the number and characteristics of the future population based on existing demographic data. The purpose of population projection analysis is to understand and predict changes in the size, age structure, composition, and distribution of the population over a given period of time (Arya Pratama et al., 2019). In the context of this study, the analysis was used to estimate the resource needs of the population of South Banjarmasin District in the next five years. Geometric Projection Analysis used i.e.

Pn = Po [1 + r] n

Where:

Pn = Number of inhabitants in years n

Po = Number of inhabitants in the initial year

1 = constant numbers

r = population growth figures (percentage)

n = Number of years range from start to year n

## Means Needs Analysis

Means need analysis is the process of identifying and evaluating existing needs related to the means or facilities required in an environment or community. In order to obtain results regarding the need for means in South Banjarmasin District of Banjarmasin City within the next ten years, researchers used the Indonesian national guidelines SNI 03-1733 of 2004 on Residential Environment Planning Procedures by performing relevant calculations.

Keterangan:

S(n) = Types of Means by standard

Pn = Jumlah Penduduk Hasil Proyeksi (Year 2028)

Sm = Minimum Standard

After obtaining the data from the calculation results, a comparison was made with the number of means that are currently available in the South Banjarmasin District area. Comparing the results of this calculation with the means that already exist today, it is possible to know the picture of the shortcomings or advantages of the means that need to be taken into account for the fulfillment of the needs in the region (Usman, 2020).

#### **Research Locations**

The study site is located in South Banjarmasin District of Banjarmasin City of South Kalimantan Province. South Banjarmasin District has an area of 38.32 km². The region lies between 3'15 to 3'22 South Latitude and 114'32 to 114'98 East Longitude. The region is bordered by Martapura River to the east, Central Banjarmasin District to the north, as well as West Banjarmasin and East Banjarmasin Subdistricts to the west and south.

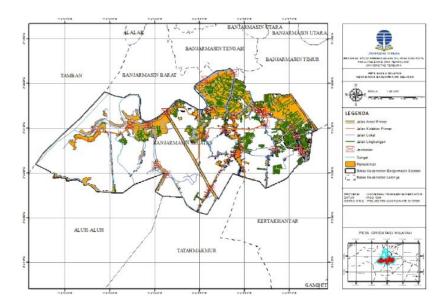


Figure 1. South Banjarmasin District Boundary Map Source: Analysis Results 2023

# RESULTS AND DISCUSSION

# Overview of South Banjarmasin District

South Banjarmasin District is one of the districts with the largest population in Banjarmasin City, amounting to 167,928 inhabitants or 25.16% of the total population of Banjarmasin City. South Banjarmasin District has 12 Kelurahan and consists of various tribes, including Suku Banjar, Suku Jawa, Suku Madura, Suku Bugis, Suku Batak, and other tribes. In the overall overview of South Banjarmasin District, there are several aspects to be discussed, namely the number of inhabitants per ward, population density per ward, and the spread of existing settlement means. This overview is related to the analysis of the needs of settlement facilities in South Banjarmasin District. Here is an overview of South Banjarmasin District.

## Area Size

South Banjarmasin District, as an administrative entity that includes the existence of 12 Kelurahan, shows details that describe the area of each ward. Information on the wide distribution of this region can be found in table 1, giving a comprehensive overview of the diverse geographical dimensions throughout South Banjarmasin District.

Table 1. Area of South Banjarmasin District by Village

No	Village Name	Area Size (Km²)	
1	Mantuil	12.24	
2	Pekauman	4.37	
3	Kelayan Selatan	1.09	
4	Kelayan Barat	1.38	
5	Kelayan Tengah	3.93	
6	Kelayan Timur	0.37	
7	Tanjung Pagar	0.30	
8	Murung Raya	0.66	
9	Kelayan Dalam	4.77	
10	Pemurus Dalam	0.20	
11	Pemurus Baru	0.35	
12	Basirih Selatan	8.66	
	Kota Banjarmasin	38.32	

Source: Banjarmasin City Government 2021

## **Number of Population**

Table 1 presented below is an overview of population evolution in South Banjarmasin District area from 2019 to 2023. The data presented in this table represent information on the population of the population during the last five-year period. The presentation of this data allows researchers to understand population growth trends over that time period and analyze the population changes that have occurred in the region over the past few years.

 Table 2. Number of Population

No	Village Name	Number of Population				
		2019	2020	2021	2022	2023
1	Mantuil	16.987	16.890	15.240	15.536	15.570
2	Pekauman	9.172	9.458	9.554	9.322	9.359
3	Kelayan Selatan	13.262	13.476	13.879	13.841	13.765
4	Kelayan Barat	6.754	6.812	6.488	6.325	6.634
5	Kelayan Tengah	7.538	7.790	7.847	7.843	7.987
6	Kelayan Timur	19.118	19.343	20.440	20.868	20.880
7	Tanjung Pagar	11.132	11.145	11.172	11.598	11.467
8	Murung Raya	13.749	13.846	13.928	13.883	14.088
9	Kelayan Dalam	10.509	10.558	10.643	10.549	10.598
10	Pemurus Dalam	23.689	23.679	23.522	23.625	23.739
11	Pemurus Baru	15.686	15.934	16.464	16.511	16.642
12	Basirih Selatan	17.915	17.763	16.532	16.978	17.109
	Kota Banjarmasin	165.511	166.694	165.709	166.879	167.928

Source: Banjarmasin City Government 2023

# **Population Density**

Through in-depth understanding of population density data in South Banjarmasin District, researchers can feel the complexity and diversity detailed therein. The total population density of South Banjarmasin District reached a significant figure, namely 4,355.11 inhabitants per square kilometer, with Kelayan Central Village being the center of the highest density reaching 40,015.31 inhabitants per square kilometer. On the contrast side, Mantuil Ward shows drastically different levels of density, only about 1,269.70 inhabitants per square kilometer. This divergence creates an interesting dynamic, providing a deep picture of the diversity and evolving changes in settlement patterns and population distribution in South Banjarmasin District.

#### **Educational Facilities**

Educational facilities serve as a benchmark in assessing educational land needs in an area, ensuring land allocation in accordance with established educational service standards, and ensuring that educational facilities are evenly available according to needs (Money et al., 2017). In South Banjarmasin District, there are a number of educational facilities that aim to provide access and support in the learning and teaching process. These educational facilities cover a variety of levels covering not only building and field buildings, but also educational facilities focused on providing comfortable and adequate learning spaces to optimally develop students' knowledge, skills and attitudes.

South Banjarmasin District provides various educational facilities, with 85 Kindergartens (Kindergartens) and equivalent units, Primary School (SD) and Madrasah Ibtidaiyah with 91 units, Secondary Schools (SLTP) and Madrasah Tsanawiyah with 22 units, Secondary Schools (SLTA) and Vocational High Schools and Aliyah Madrasah with 11 units, and 2 private colleges units. Accessibility to the various educational facilities is very easy to reach by public transport, and the buildings are generally still in good condition and worthy of use.



Figure 2. Educational Facilities in South Banjarmasin District

## **Health Means**

Health care facilities refer to the means and premises used to carry out various types of health services, including promotion, prevention, treatment, and rehabilitation efforts, that can be organized by government agencies, local governments, or communities (Alwi et al., 2019). These facilities include a hospital, a polyclinic/treatment center, a health center, and a pharmacy.

In South Banjarmasin District, there are various health facilities that include 1 hospital, 8 polyclinics/treatment halls, 2 health centers with inpatient services, and 4 health centers without inpatient services. In addition, there are also 30 pharmacies that provide medical needs and pharmacy services. Accessibility to these various health facilities is very easy, as they are located close to public vehicles and are within easy reach of the public. In addition, the buildings of these health facilities are generally still in good condition and worthy of use.



Figure 3. Health Facilities in South Banjarmasin District

## **Religious Means**

As an important element in supporting the conduct of religious activities, the facilities of places of worship play a significant role (Sadali et al., 2018). The means of worship that exist in South Banjarmasin District include various places of worship used by various religious groups in the community. These facilities are important places for worship and other religious activities, and play a role in supporting religious life in the region. The number of mosques in this district reaches 50, while langgar, which is also a place of worship in Islam, number 228. In addition, there are 3 churches used by the Christian community, 1 monastery used by Buddhist adherents. The building

facilities of these various places of worship are generally in a fairly decent condition for use, thus allowing the community to conduct worship comfortably. Access to these places of worship is very easy, as many of them are located close to public transport links.



Figure 4. Religious Facilities in South Banjarmasin District

#### Means of Trade and Commerce

The development of the market reflects the government's determination in improving economic competitiveness as well as encouraging people's trading activity. The existence of this facility is expected to have a positive impact on the well-being of traders through increased sales, as well as promote active economic turnaround, which in turn can significantly spur growth and development of the region (Sadarudin et al., 2023). In South Banjarmasin District, there are a number of means of trade and commerce that include various types of business and commercial activities. The shops numbered 3, providing a variety of goods needed by the community. The market, of 15 pieces, is the main place for traders and consumers to transact. Convenience stores, numbering 16, provide a variety of daily necessities with a more modern store format. The shops/stalls, totaling 832 units, are small places scattered throughout the district, allowing people to shop in locations close to their homes. Restaurants/cafeterias, with a total of 29, provide diverse culinary options for the residents of the district. These facilities have decent and good buildings, thus supporting the trade and commerce activities that take place in the region. Access to trading places is very easy, and most of them are located close to public transport lines, making them more accessible to the public.



Figure 5. Means of Trade and Commerce in South Banjarmasin District

# **Green Open Space Facility and Sports Field**

The Green Open Space Facility (RTH) has the aim of maintaining the balance of the residential environment and supporting the survival of the population in the region by providing a source of fresh air and sunlight (Choiriyah & Prasetiyo, 2018; Munawir et al., 2022a). In South Banjarmasin District there are as many as 5 playgrounds, in addition, there are 7 parks and sports fields that are used by the community for various types of sports and leisure activities. Also, there are 30 cemeteries that are the final resting places for the citizens of the community. The facility is located close to public vehicle access and easy to reach by various sections of the public.



Figure 6. Sports Field Facilities in South Banjarmasin District

## Means Needs Analysis

Analysis of the resource needs in South Banjarmasin District is an in-depth process that takes into account a number of important factors in regional planning. One of the main factors in the calculation of facility needs is the projected number of residents for a given period of time. Population projections have a central role in determining the number of facilities required within an area. It becomes a key element in the preparation of future territory plans.

Several previous studies, such as Romadhona (2020), have also investigated the relationship between population growth and the level of need for social facilities. Therefore, in the analysis of the need for resources in South Banjarmasin District, previous references and research became an important foundation.

**Table 3**. Availability of Means and Their Needs in the projected year 2033

No	Types of means	Standards SNI 03- 1733-2004	Number of Populati on in 2023	Amount Means 2023	of in	Number accordin g to SNI	Number of Population in 2033	Projected Resource Needs 2033
Edu	cational Facilities							
1	TK/RA	1.250		85		134		135
2	SD/MI	1.600		91		105		105
3	SMP/MtsN	4.800	167.928	22		35	168.604	35
4	SMA/MA	4.800		11		35		35
5	Taman Bacaan	2.500		0		67		67
Hea	Health Means							
1	Posyandu	1.250		85		134		135
2	Puskesmas	120.00		6		1		1

3	Apotik/Rumah	30.000		30	6		6
-	Obat		167.928		~	168.604	~
4	Balai	2.500		8	67		67
	Pengobatan						
	Warga						
Rel	igious Means						
1	Mesjid Warga	2.500		50	67		67
2	Musholla	250		228	671	168.604	674
3	Sarana Ibadah	0		4	0		0
	Agama Lain		167.928				
Mea	ans of Trade and (	Commerce					
1	Toko/Warung	250		823	671		674
2	Pertokoan	6.000		19	27	168.604	28
3	Pasar	30.000		15	6		6
	Lingkungan		167.928				
4	Pusat	120.000		0	1		1
	Perbelanjaan						
Gre	een Open Space Fa	cility and Sports	Field				
1	Taman/Tempat	2.500		5	67		67
	Bermain					168.604	
2	Lapangan	30.000	167.928	7	6		6
	Olahraga						
3	Makam	4.800		30	35		35

Source: Analysis Results 2023

Based on the analysis carried out in Table 3, it can be known that in 2023, South Banjarmasin District will need to consider infrastructure development in a number of key sectors, in accordance with Indonesian National Standard (SNI) 03-1733-2004. In education, although Kindergarten/RA facilities meet SNI standards, projections show an increase in needs until 2033, while Primary, Secondary, and SMA/MA require an increase in needs as projected. Health facilities such as Posyandu, Health Center, Apotic/Drug House, and Citizen Medicine Hall currently conform to SNI standards, with slight variations on future projections of needs. In the religious sector, the Resident Mosque requires improvement according to projected needs, while Musholla, despite exceeding the standard, still needs additional facilities. Means of trade and commerce, especially Stores/Stalls, showed excess in accordance with SNI standards, while Shops and Shopping Centers were in compliance with standards, and Neighborhood Markets showed decreased need. Green Open Spaces and Sports Fields require upgrades, especially Parks/Playgrounds, as per projected needs, although Sports Grounds and Graves already meet standards.

In support of these findings, a previous study conducted by (Alwi et al., 2019) in Selong Subdistrict, East Lombok Regency in 2022, highlighted the need for additional health facilities, including health centers, posyandu, auxiliary health centers, laboratories, maternity homes, and treatment halls. Although some facilities such as hospitals, drug shops/dispensaries are adequate, it is important to improve the quality of standards and services according to the above analysis. This provides a holistic view of infrastructure needs across different sectors to ensure balanced and quality development.

#### **CONCLUSION**

The availability of educational facilities in South Banjarmasin District in 2023 still shows non-conformity with the prevailing SNI standards. This discrepancy includes the number of educational facilities for different levels. For comparison, here are projections for the addition of educational facilities for each level in the next ten years: 50 units for kindergarten, 14 units for primary school, 13 units for middle school, 24 units for high school, and 67 for reading parks. Meanwhile, the number of health facilities available in South Banjarmasin District has not reached the established standards, except in dispensary facilities whose number has exceeded the standard. Currently, there

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are 85 posyandu, 6 health center units, 30 pharmacy units, and 8 citizen medicine hall units. For the means of worship, there is a need to improve the means of worship in South Banjarmasin District. The number of mosques in the region has not met the established standards, which is as many as 50 units, and is currently spread over 12 wards. In terms of means of trade and commerce, the shop/stall facilities have adequately followed SNI standards. There are about 823 shops/stalls, but there are still discrepancies in the facilities of shops, neighborhood markets, and shopping centers. Today, there are 19 shops and 15 market units that play an important role in the economy and meet the needs of the community. However, it should be noted that those markets have not yet functioned fully as expected from the market in general. As for the means of green and sports open space, 62 additions were needed to the playground facilities, and 5 cemeteries. Research on the Analysis of Resource Needs in South Banjarmasin District with the finding that deficiencies occur in various educational facilities, worship (especially mosques), health (such as posyandu and residents' treatment halls), as well as green open spaces (including playgrounds and tombs) is an important result. To overcome this shortcoming, here are some suggestions: (1) development Planning. The City Government of Banjarmasin and related institutions need to develop a plan for the development of educational facilities. This includes the construction of new schools, good maintenance, and improving the quality of existing facilities. (2) improvement of the means of worship. To meet the needs of worship, it is necessary to consider the construction of mosques in deprived areas. It is important to support the spiritual needs of the community. (3) improvement of Health Facilities. Improving access to health care by expanding posyandu and health centers in areas in need. It will help improve people's quality of life. (4) green Open Space Development. Encourage the construction of green open spaces, including adequate playgrounds, parks, and cemeteries to meet community needs and create a more comfortable environment. (5) collaboration between governments, NGOs, and the private sector can accelerate the development of lacking facilities. By supporting these projects, it can ensure that people's needs are met. (6) monitoring and Evaluation. It is always important to monitor and evaluate the implementation of the development plan. This will help ensure that the facilities built meet existing needs. By taking these measures, it is hoped that the lack of facilities in various sectors will be addressed, and people will benefit from improved quality of life and better access to education, health and religious facilities.

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