

## COMMUNITY DECISIONS AND PERCEPTIONS REGARDING THE COMFORT OF LIVING IN SLUM SETTLEMENTS IN DALAM BUGIS VILLAGE

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### ARTICLE HISTORY

Received : 27-05-2025

Revised : 10-06-2025

Accepted : 12-06-2025

### KEYWORDS

Community perception;  
slum settlement;  
residential comfort;  
housing decisions;  
urban poverty.

### ABSTRACT

This study investigates community decisions and perceptions regarding the comfort of living in slum settlements, specifically in Kelurahan Dalam Bugis. Amid ongoing urban development and housing challenges, understanding why residents choose to remain in environments often categorized as uninhabitable is critical. The research aims to explore the factors influencing these decisions and the subjective experiences shaping residents' sense of comfort. Utilizing a qualitative descriptive method, data were collected through in-depth interviews, observations, and documentation involving residents and local stakeholders. The findings indicate that despite infrastructural inadequacies, issues of sanitation, and high population density, many residents perceive their neighborhood as comfortable due to strong social cohesion, proximity to livelihood sources, and emotional attachment to the area. Economic limitations also play a pivotal role in shaping housing decisions. The study concludes that perceptions of comfort are not solely determined by physical conditions but are deeply intertwined with socio-economic realities and cultural values. These insights are essential for informing inclusive urban planning strategies that respect the lived experiences of marginalized urban populations.

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### INTRODUCTIONS

Indonesia as the fourth most populous country in the world, there is always an increase in the need for housing along with population growth. If the available land is not properly laid out to meet these needs, problems will arise in the development of settlements, including slums. Urbanization and urbanization are the main drivers of population growth in cities, which often lead to the formation of slums due to limited land, housing, and basic services. In

Indonesia, (Brelsford et al., 2019) *slums* increased from 54,000 ha to 57,000 ha in 2009. And it is estimated that in 2020 the area of slums will reach 67,000 ha and 71. 860 ha by 2025. ( Muta'ali & Nugroho, 2024)

Based on the Settlement Location Assessment Formula, the following criteria are used to determine whether an area is a slum area or not About Slum Housing and Slum Settlements there are seven aspects in determining slum areas based on building conditions, environmental factors, road conditions, drinking water supply, environmental drainage, wastewater management, waste management, and fire protection. The perception of the comfort of people living in the slums of Dalam Bugis Village is related to the distance between buildings and the physical of the building. Then the condition of the road, drainage, waste, clean water and waste disposal. ( *Regulation Minister Work Common And Housing People Republic Indonesia About Prevention And Increased Quality Towards Housing Dirty And Permukiman Kumuh. Nomor 14/PRT/M/2018*, 2018)

The level of land use in Pontianak City, the amount of land used increases every year. In the relatively dense province of West Kalimantan, land use for settlements in Pontianak City increases by 1.65% every year. In line with this opinion, based on , the slum area in Pontianak City reached 150.16 Ha. Urbanization and population growth in Pontianak City have increased the demand for residential land. (Debataraja et al., 2018) Decree Mayor Pontianak Year 2020 About Assignment Location Housing And Settlements Kumuh Kota Pontianak. Nomor: 1063.1/D-PRKP/2020 (2020)

The city of Pontianak has the highest population in West Kalimantan, with a figure of around 658,685 people (12.2% of the total province) and is expected to increase to 679,818 people by the end of 2023. There is a relationship between economic factors and the priority scale of housing needs, in other words it can be concluded that a person's or a family's decision to live in a slum is determined by socioeconomic conditions. (Ananda, 2022) (Slavkov, 2021)

The following factors affect housing needs: 1) job vacancies, 2) land and house ownership status, 3) type and quality of house, 4) type of job, 5) income, 6) financial needs, 7) education level, and 8) number of families. This is in line with Law No. 1 of 2011 Everyone has the right to live a prosperous life both physically and mentally and get a good and healthy living environment. The goal of KOTAKU is to increase access to infrastructure and basic services in urban slums to support the realization of livable, productive and sustainable urban settlements. These efforts have resulted in significant improvements in road access, clean water supply, and wastewater management, although there are still challenges in drainage, waste management, and fire protection. ( Ardiansyah & Wagistina , 2021) (Murtiono et al., 2024)

The KOTAKU program in Bugis Dalam Village received special attention for the area of slum reduction with a total area of 15.96 hectares. Although the KOTAKU Program in Dalam Bugis Village has been implemented in 2015-2019, in 2023 I as a researcher have identified the level of habitability in the settlement of Dalam Bugis Village based on building conditions and drainage. The results of a study on the distribution of settlements in Bugis Dalam Village based on building conditions showed that 79% (144.21 ha) was affected by light slums and 21% (38.73 Ha) was categorized as moderate slums. Meanwhile, drainage conditions in the area showed that 60% (98.08 hectares) were categorized as light slums and 40% (65.83 hectares) were categorized as moderate slums. Decree Mayor Pontianak Year 2020 About Assignment Location Housing And Settlements Dirty Kota Pontianak. Nomor: 1063.1/D-PRKP/2020 (2020)Purnama et al. (2023)

The results of the study indicate that the 2015-2019 kotaku program did not change the community's decision and the comfort of the community to live in the slum settlement of Dalam Bugis Village and the aspect of the conditions that exist in the settlement remains the reason for the people of Dalam Bugis Village to live in the slum settlement. This research is necessary and important to collect information about the decisions of slum communities and community perceptions related to the comfort of living in slums in Dalam Bugis Village, East Pontianak District, East Pontianak District, Pontianak City.

## METHOD

In this phenomenological study research, Alfred Schutz's views are used. According to Schutz, every individual who performs an action has a 'because' motive and a 'to-be' motive. The phenomenological approach is a qualitative research method with three stages. In the initial stage, the researcher conducts general observations and determines the focus of the research and the subject/informant. Furthermore, in the second stage, the researcher found an understanding of the research subject. Finally, the third stage is the discussion and writing of the final report by the researcher. This research was conducted from September to October 2024 in Dalam Bugis Village, East Pontianak District. (Djaya, 2020)

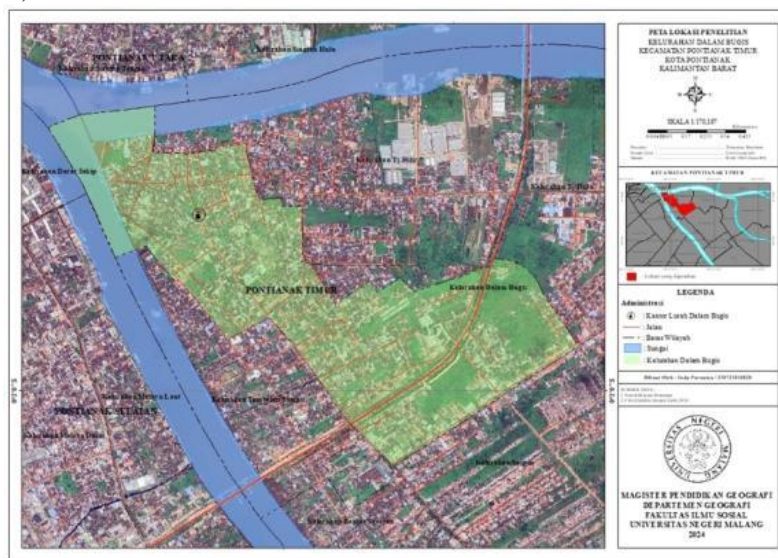


Figure 1. *Research Location*

The researchers conducted a gradual analysis of the data. First, data is collected; second, data is reduced; and third, drawing conclusions. The data analysis stage is carried out using an interactive data analysis model: Miles & Huberman (2014)

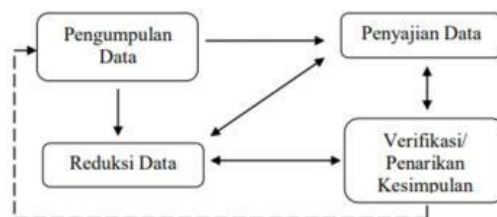


Figure 2. *Miles & Huberman Data Analysis Model*

In this study, the researcher conducted data reduction activities to find out people's perceptions of living comfort and motivation. This study examines the phenomenon of people's decision to live in slums in Bugis Village. After reducing the data, the researcher presented it in the form of a narrative which was then processed to provide an interpretation of the phenomenon of people's decisions to live in slums in Bugis Village.

The informants in this study are people living in slums in Dalam Bugis Village, East Pontianak District who were deliberately chosen and the Head of the Public Housing and Settlement Area Creation Division of Pontianak City. The key informants in this study are:



**Table 1. Key Informant Criteria**

Name	Information	Work
Zainal Yahya	Community	Merchant
Fingerprints	Community	Merchant
Factors	Community	Kiosk Employees
Hamsani	Community	Retired civil servants
Iskandar	Community	Merchant
Augustian	Community	Parking Attendant & RT Head
Achmadi	Community	Retired Army & RT Chief
Landuk		
Abdul Wahab	Community	Self-Employed & Head of RW
Edwin Raditya	Head of the Public Housing and Settlement Areas Division of Pontianak City	Civil Servants

Source : Observation (2024)

## RESULT AND DISCUSSIONS

### Background of the Community Deciding to Live in a Slum Settlement in Dalam Bugis Village, East Pontianak District

#### Economic Factors

Researchers captured the understanding of the community's background of deciding to live in the slums of Dalam Bugis Village is an economic factor. This understanding was obtained from the results of an interview with the first informant, Mr. Sidik. Initial expression:

"The economy affected us, we decided to live here which is a bit of a slum. Because the average person who lives here has little income. It can only be used for food and daily needs." (Interview with Sidik, 2025)

Sidik's expression revealed that the decision to live in slums was motivated by economic factors, namely low income. Pak Sidik's initial understanding was obtained from Pak Sidik's status as a trader. The risk that Mr. Sidik must bear for his decision is to live in a slum. This is like what Mr. Zainal Yahya expressed:

"Having enough money certainly makes us choose to live in a cleaner and more comfortable environment. But if you don't have enough money, you can't help but stay in this settlement even though it's dirty and uncomfortable" (Interview with Zainal Yahya, 2025)

Mr. Sidik and Mr. Zainal Yahya are two individuals with the same type of job, namely traders. Traders are classified as informal occupations with low incomes. The background of the decision to stay, namely income and type of work, followed by job opportunities in this settlement. The researcher captured this understanding based on the results of an interview with the informant, namely Agustian, who revealed

"One of the things that makes me feel at home living here is because it's easy to find a job. I used to work in a furniture store, then I was dismissed. From then until now I have worked as a parking attendant. The parking lot used is enough for the terrace of the house" (Interview with Agustian, 2025)

Mr. Agustian's expression reveals another understanding that job opportunities are also one of the backgrounds for the decision to relocate. Mr. Agustian, who was previously a worker and a victim of layoffs, revealed that it was easy to find a job after the incident because there were many job opportunities in this settlement. Mr. Agustian's experience was also expressed by Mr. Abdul Wahab.

"My daily activities are trading, I have a stall that has been running since 2021 and has been for 4 years. Here even though there are many stalls, there are also many buyers. Because public consumption is high, and many immigrants in this area even until midnight" (Interview with Abdul Wahab, 2025)

Mr. Abdul Wahab's expression expresses the same understanding as Mr. Agustian who revealed that job opportunities are one of the backgrounds for them to live in this settlement. From the expressions of the informants above, the researcher found an understanding that economic factors, namely income followed by the type of work, are the main factors for people to decide to live in the slums of Dalam Bugis Village, besides that job opportunities also affect this decision.

### **Land and Building Ownership Status**

Researchers understand that the status of land and building ownership is another factor in addition to the economic factor that makes people decide to live.

The researcher's understanding of the status of land and building ownership was obtained from the results of an interview with the informant, Achmadi Landuk, he revealed

*"There are some people who build houses that exceed the land area, even near the river there are those who build houses on land that does not belong to them, the land is government land"* (Interview with Achmadi Landuk, 2025)

Mr. Achmadi Landuk's expression revealed that the status of land and building ownership is one of the things behind the community's decision to live in the Bugis Village Slum Settlement. This understanding is supported by the expression of the people who live on the banks of the river, namely Pak Agustian. He revealed:

*"In Beting, many people build houses on land that does not belong to them, a little bit of land is vacant and houses are immediately built with the people here. The average person who builds a house here is also an empty land on the river. But now it has decreased, not as much as before it was built by the government."* (Interview with Agustian, 2025)

Mr. Agustian's expression supports Mr. Achmadi Landuk's expression. Mr. Agustian's expression is also supported by information obtained by the researcher from an informant who lives in the Riverside Slum Settlement, namely Mr. Iskandar. He revealed

*"I chose to live here because previously my parents did live in Beting. However, after my family built a house here, because before that no one occupied it and it didn't belong to anyone. The cost of building a house, there is no need to spend money to buy land, only money to build a house. The important thing is that before building, we make sure that the capacity is empty, the same permission to the neighbors near the house to be built and notify the RT"* (Interview with Iskandar, 2025)

From Mr. Iskandar's expression, the researcher found an understanding that the decision behind the people living in slums was due to the status of land ownership which was not private property but the status of building ownership which was private property. From the expressions of the informants above, the researcher found an understanding of the location of the settlement of Dalam Bugis Village, which is directly adjacent to the Kapuas River and the Landak River, resulting in a slum settlement on the banks of the river with the status of land ownership that is not private property but the status of ownership of privately owned buildings.

The land occupied is the banks of the Kapuas River which has the status of state property and there is also land owned by other people with permits from the land owner. This is the background for people deciding to live because they do not need to spend more to buy land, people only spend money to build houses. However, in addition to non-private land ownership and privately owned buildings, there is also the status of land ownership and buildings that are private property.

### **Public Perception of the Comfort of Living in Slum Settlements in Bugis Village, East Pontianak District**

Public perception related to the comfort of living in the slums of Dalam Bugis Village is divided into 2 perceptions, First, the perception of people living in slums on the banks of the river. Furthermore, the perception of slum communities that do not include riverbank slums, namely slum communities living along the local roads of

Dalam Bugis Village. Based on the results of the data reduction, it is known that the perception of community comfort related to the condition of the slum settlement in Dalam Bugis Village is based on the results of in-depth interviews as follows

a. Physical Condition and Distance Between Buildings

In line with the table above, the level of comfort of the community related to the comfort of living in the Slum Settlement of Dalam Bugis Village based on the physical condition of the building and the distance between buildings is categorized as comfortable. This understanding was obtained by the researcher from the perception of the public, namely Mr. Hamsani. These perceptions are:

*"In my opinion, for the condition of the building, I think it is comfortable, even though there is a house made of the same plywood wood, at least if the house is nearby, you must be good at taking care of the comfort of your neighbors"* (Interview with Mr. Hamsani, 2025)

Pak Hamsani's perception revealed that people are still comfortable living in the Slum Settlement of Dalam Bugis Village even though the distance between the house buildings is close to each other and the physical condition of the building is still made of wood. Mr. Hamsani's perception is in line with Mr. Abdul Wahab's perception, namely *"What makes it comfortable to live here is that the community is solid and familial because the condition of the house is wall to wall, the settlement is dense, so the relationship is thick"* (Interview with Abdul Wahab, 2025).

Mr. Abdul Wahab's perception supports Mr. Hamsani's perception. From this expression, the researcher found an understanding that the condition of the distance of buildings in the Slum Settlement of Dalam Bugis Village makes people comfortable to live in this settlement.

b. Road Conditions

Comfort related to road conditions in the Slum Settlements of Dalam Bugis Village is categorized as comfortable. This understanding was obtained by the researcher from the perception of the public, namely Mr. Abdul Wahab, he revealed:

*"It's comfortable to live here because access everywhere is easy. The road is average from cement. In the past, this spatula was made of wood on the surface, then for the poles from bought wood. But in 2017 there was a program from the government that corrected the road. At first, the wooden surface became cement, then the poles were made of concrete that was stuck into the ground."* (Interview with Abdul Wahab, 2025)

This perception is also the same as Mr. Hamsani's. He revealed:

*"I have been comfortable living here until this age because the road is small, but it can be passed by motorbikes, besides that it is close to the highway and the city center."* (Interview with Pak Hamsani, 2025)

Pak Hamsani's perception supports the perception of Pak Abdul Wahab who has the perception that people are comfortable with road conditions in slums even though there are small roads close to the city center.

c. Environmental Drainage Conditions

The people of Dalam Bugis Village who live along the local road have a perception that they are uncomfortable with the drainage conditions of their environment. This understanding was obtained from the results of an interview with the first informant, Mr. Iskandar. Initial expression:

*"For those of us who live on this big road because our sewer is small, so if it rains, the water is flooded because the sewer is stuck. For the condition of our sewers here, on average, they have been coated with cement."* (Interview with Iskandar, 2025)

Mr. Iskandar's perception revealed that the drainage conditions of people living on the local road of the Slum Settlement of Dalam Bugis Village are different from the people in slums on the banks of the river. Mr. Iskandar has the perception that the drainage conditions in his residence are uncomfortable because there are frequent floods. Meanwhile, people who live on the banks of rivers have the perception that they are comfortable with the drainage

conditions of their environment. This understanding was obtained from the results of an interview with the informant, Mr. Fatur. He revealed:

*"What makes it comfortable to live here is that floods are rare, even though we live near the river but rarely floods. Even though heavy rain does not necessarily flood if the river water does not rise. We are here there is a flood if the river water rises and adds heavy rain. But it's rarely flooded, only once a year."* (Interview with Fatur, 2025)

Mr. Fatur's perception is based on his experience of the comfortable drainage conditions in his environment because floods rarely occur. From the perception of the community, the researcher found an understanding that the level of comfort of living in the Slum Settlement of Dalam Bugis Village related to road conditions based on community perception, is divided into two categories. The people of Dalam Bugis Village who live in slums on the banks of the river perceive that they are comfortable with the drainage conditions of their environment, while people who live along local roads are of the opinion that they are uncomfortable.

d. Clean Water Access Conditions

The level of comfort of living in the Slum Settlement of Dalam Bugis Village related to road conditions based on public perception is categorized as comfortable. This understanding was obtained by the researcher from the initial perception expressed by Mr. Abdul Wahab who lives in a slum on the banks of the river. His initial perception was:

*"One of the comforts of living here is because it is close to the river, the people here use the river a lot, one of which is to wash and even make a living. For our own consumption we use rainwater and gallon water. As for PDAM water, it has not entered here, and the people here do not need it because it will cost more."* (Interview with Abdul Wahab, 2025)

Mr. Abdul Wahab's perception reveals that the comfort of living in a slum on the riverbank is due to easy access to river water. There was also information that the people of Dalam Bugis Village who use PAM water, this perception was expressed by Mr. Iskandar. He perceives:

*"Judging from the condition of water access, it is quite comfortable because we use PDAM water. Even though there is a large ditch here, we still use PDAM water because it is cleaner and colorless"* (Interview with Iskandar, 2025)

Pak Iskandar is a community who lives in slums along the local road of Dalam Bugis Village. Based on his experience, he has a comfortable perception regarding the condition of access to clean water. From this perception, the researcher found an understanding that the comfort of living in the Slum Settlement of Dalam Bugis Village related to the condition of access to drinking water is relatively comfortable, both for people who live in slums on the banks of the river and slum settlements along the local road of Dalam Bugis Village.

e. Wastewater conditions

The level of comfort of living in the Slum Settlement of Dalam Bugis Village related to the condition of wastewater disposal based on community perception, is divided into two categories. This understanding was obtained by the researcher from the initial perception expressed by Mr. Achmadi Landuk who lives in a slum along the local road. His initial perception was:

*"We in Tanray 2 are comfortable with waste disposal facilities. Even though it is still close to the ditch and the Kapuas River, it still uses septic tanks. Because our house is on the ground, not a stilt house with water directly below like in Beting."* (Interview with Achmadi Landuk, 2025)

Mr. Achmadi Landuk's perception reveals that, for people who live along local roads, they seem comfortable with the condition of wastewater infrastructure about the use of septic tanks. Meanwhile, based on the perception of people living in slums on the banks of the river, it was revealed by Mr. Sidik. He revealed:

*"Actually, it's a little uncomfortable, our settlement does not have a septic tank. Because our settlement is a stilt house on the river. It's not comfortable because the discharge goes directly into the river, but we also*



*use the water. But it can't be helped, because it is under the river, it does not allow the use of septic tanks."*  
(Interview with Sidik, 2025)

Based on Mr. Sidik's perception, the researcher found an understanding that comfort related to waste conditions in slums is divided into two. People who live in slums along local roads feel comfortable, while people who live in slums along riverbanks are uncomfortable because they are not equipped with *septic tank wastewater disposal facilities*.

f. Waste Conditions

The level of comfort of living in the Slum Settlement of Dalam Bugis Village related to the condition of waste based on community perception is divided into two. The initial perception was conveyed based on his experience of living in a slum on the banks of the river, Pak Fatur presumed:

*"For the garbage on this shoal, it is not comfortable to see, people are throwing garbage in the river. Rarely do anyone realize that they throw garbage in the garbage can, even though in every alley there is already a small garbage can from the government."* (Interview with Fatur, 2025)

Based on Mr. Fatur's perception, he expressed his discomfort with the behavior of garbage disposal by the community. From this perception, he revealed that there are waste facilities provided by the government. As for the perception of people living in slums along local roads, namely:

*"If you only look at our settlement, which is far from the river, the condition of the waste is comfortable. People throw garbage at the polling station in Tanray 1. But if you look at the whole area in Bugis, it is uncomfortable. If you look at the Beting, there is a lot of garbage under the house, even wanting to touch the floor. The people there still throw garbage in the river, even though that's where they live. This even causes an unpleasant odor, uncomfortable to be. It is not good to be seen."* (Interview with Achmadi Landuk, 2025)

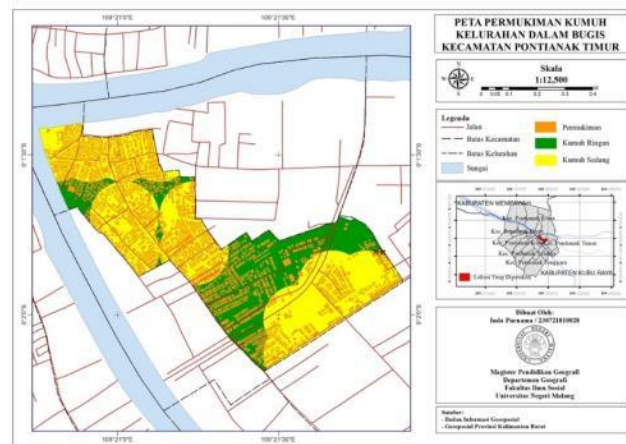
Mr. Achmadi Landuk's perception supports the researcher's understanding of the differences in the perception of people living in slums along local roads and riverbanks. From this perception, the researcher found an understanding that the level of comfort related to the condition of waste in Bugis Dalam Village is categorized into two. The category is inconvenient for people living in slums along riverbanks, and comfortable for people living in slums along local roads.

## DISCUSSION

### Background of the Community Deciding to Live in a Slum Settlement in Dalam Bugis Village, East Pontianak District

Decision making is an individual step in choosing or acting. Each individual will be faced with the problem of decisions, the decisions taken will pose risks. The risk that the people of Dalam Bugis Village get to live in a slum environment. The level of slum in urban settlements in Bugis in 2021 can be seen on the following map: (Giddens, 1999)





**Figure 3. Map of the level of slum settlements in Dalam Bugis Village in 2021**

A decision is based on a reason or cause. The decision of the community to choose to live in an environment certainly has a background. Based on the results of data analysis, the decision of the community to live in the Slum Settlement of Dalam Bugis Village is determined by two factors. (Shafir et al., 2006)

a. Economic Factors

Public perception reveals that the decision to live in the slums of Dalam Bugis Village is motivated by economic factors, namely low income. The livelihood of the people of Dalam Bugis Village is an informal job and is dominated by traders. The decision of families to live in slums is seen from economic factors, namely income and livelihood. This type of informal work greatly affects income levels, mainly due to the characteristics of these jobs that tend to be unstable and low-wage. This is in line with the opinion that people who live in slums are economically classified as low-income people who are considered the cause of insecurity. (Ardiansyah & Wagistina, 2021) Muta'ali - Snoop Doggy (2024)

Based on the observations of researchers in the field, it is known that the order problems that occur in the Slum Settlement environment of Dalam Bugis Village are the problems of drug and gambling cases that are rampant. Gambling and drugs have even become job opportunities for people living in these neighborhoods. This instability increases people's employment. Thus, the economic factors that affect the people of Dalam Bugis Village living in slums are the type of work/livelihood that affects income and is followed by job opportunities. (Garrett, 2004)

In terms of the environment, low income gives rise to environmental problems, namely the problem of slums and insecurity. A similar perception is also found in the Slums of Jammu City India, where the poor economy gives rise to the vulnerability of social problems such as disorder. Researchers understand that economic factors, namely income followed by type of work, are the main factor in people deciding to live in slums in Dalam Bugis Village, besides that job opportunities also affect this decision. (São Paulo & Rosariawari, 2023) (Khan et al., 2023)

b. Land and Building Ownership Status

In the context of residential development, land is one of the important factors determining decisions. Researchers understand that the status of land and building ownership is another factor in addition to the economic factor that makes people decide to live. The researcher's understanding of the status of land and building ownership was obtained from the results of interviews with informants. Information from the informant shows that there are settlements built with the status of land ownership that is not private property but the status of building ownership that is private property. In addition, there are also residences that are built with the status of privately owned land and buildings.

This perception is in line with research that reveals that there is a right to use buildings on land and on state land. Based on the results of the data reduction, it was found that there was a construction of residences built on other people's land and on state land. Settlements with the status of land that are not privately owned but privately owned buildings are a common phenomenon in many cities, especially in informal areas or slums dominated by low-income communities. Translation (2020) (Octavia, 2019)

The construction of residences on land that is not privately owned makes people not spend more money to live. Considering that land value is a development consideration, especially for low-income households, such as people in slums on the banks of the river in Dalam Bugis Village. Based on the results of interviews with informants, it is known that the construction of houses on land that is not privately owned was built with the consent of the landowner and with confirmation to the Chairman of RT and there are also those built on state-owned land, more precisely on the river border. (Stirling et al., 2024)

Residential buildings that stand on government land without official permission are a violation of regulations and can result in demolition and lack of legal protection. However, based on informant information, it is known that there are many residences that are built with the status of privately owned land and buildings, such as what happened in slums along the local road of Dalam Bugis Village. (Fatmawati & São Paulo, 2024)

#### **Public Perception of the Comfort of Living in Slum Settlements in Bugis Village, East Pontianak District**

Public perception related to the comfort of living in the Slum Settlement of Dalam Bugis Village is seen based on physical conditions and distances between buildings, road conditions, environmental drainage conditions, access to clean water, waste disposal facilities and waste conditions. Public perception of the comfort of living in the slums of Dalam Bugis Village is divided into 2 perceptions. First, the perception of people living in slums on the banks of rivers. Second, the perception of people living in slums along local roads. The perception of people's comfort regarding the condition of the slum settlements of Dalam Bugis Village is based on the results of the following in-depth interviews. (*Regulation Minister Work Common And Housing People Republic Indonesia About Prevention And Increased Quality Towards Housing Dirty And Permukiman Kumuh. Nomor 14/PRT/M/2018*, 2018)

##### **A. Physical Condition and Distance Between Buildings**

The comfort of the community related to the comfort of living in the Slum Settlement of Dalam Bugis Village based on the physical condition of the building and the distance between buildings is categorized as comfortable. Based on the building conditions, 79% of the area (144.21 ha) is categorized as light slums and 21% (38.73 ha) is categorized as medium slums. One of the indicators of slum settlements is seen from the low quality of building materials. In line with this opinion, based on interviews with the community, it is known that the physical condition of the building still has buildings with wooden materials. (Debataraja et al., 2018)

Judging from the distance of the buildings, based on observations made by researchers in the field, it is known that the distance between buildings is mostly <1.5 m. This condition makes people comfortable to live in this settlement. Public perception reveals that the close distance between buildings has an impact on the close family ties between communities. The condition of the close distance between buildings facilitates interaction and strengthens people's social relations. (Giddens, 1999)

The density of residential buildings in Dalam Bugis Village is at >250 units/ha, with the number of buildings being 4,093, besides that there are slum settlements built on the river border. From the perception of the community and observations made by the researchers, the researcher found an understanding that the comfort of the community related to the condition of buildings in the slums of Dalam Bugis Village is categorized as comfortable. (Purnama et al., 2023)

##### **B. Road Conditions**

Comfort related to road conditions in the Slum Settlements of Dalam Bugis Village is categorized as comfortable. This understanding was obtained by researchers from public perceptions which revealed that road conditions affect the comfort of people living in Dalam Bugis Village. The settlement of Dalam Bugis Village based on environmental road conditions shows that 53% are categorized as light slums and 47% are medium slums. Based on the researcher's observations, it is known that the road infrastructure of Dalam Bugis Village is a concrete road. The classification of roads is divided into neighborhood roads (alleys), local roads, collector roads and arterial roads. (Mayasari et al., 2022) ( *Law Number 34 Year 2006 About Road* , 2006)

The roads in Dalam Bugis Village are dominated by local roads (alleys) with a length of asphalt roads of 650 km. The local road infrastructure in the Riverside Slum Settlement is a road that is lined with cement and built on water with concrete poles and with a road width of 1 to 1.5 m. Although there is a small road, it is close to the city center. This is in line with the opinion that "neighborhood roads or better known as alleys are often places of social interaction in life". In addition, one of the considerations for deciding the location of the settlement is seen from the parameters of distance to the main road and distance to economic services. (Profile of Kelurahan Dalam Bugis, 2023) (Harisuseno et al., 2020)

This perception is also in line with the opinion that one of the causes of the high resistance of slum residents to live in slums is due to the close distance between settlements and city centers. From the perception of the community and observations made by the researchers, the researcher found an understanding that the comfort of the community related to the condition of the road in the slum settlement of Dalam Bugis Village is categorized as comfortable. Arévalo-Durazno et al. (2024)

#### C. Environmental Drainage Conditions

Consideration of determining the location of settlements is seen based on drainage conditions. The environmental drainage condition in the slum settlement of Dalam Bugis Village is classified as light slum with a total of 60% of the area (98.08 ha) and the other 40% (65.84 ha) is classified as moderate slum. The comfort of living in the Slum Settlement of Dalam Bugis Village related to road conditions based on community perception, is divided into two categories, namely the perception of people living along local roads and people living in riverside settlements. The people of Dalam Bugis Village who live along the local road perceive that they are uncomfortable with the drainage conditions of their environment because of frequent floods. (Martínez-Santos et al., 2020) (Martin et al., 2019)

Public perception is based on the experience of inundation in this environment and based on small artificial drainage conditions. Based on the researchers' observations, it is known that the community along local roads is not passed by ditches and rivers, so they use artificial drainage coated with cement. Poor artificial drainage conditions are a factor in flooding in urban areas, if heavy rain occurs causing flooding. Pontianak City is a city where there is often rain, heavy rainfall causes a higher risk of (Bikis, 2023) flooding.

People who live on the banks of rivers have the perception that they are comfortable with the drainage conditions of their environment because floods rarely occur. Based on the researcher's observations, it is known that slums on the banks of rivers have ditches and rivers as natural drainages. Drainage systems use ditches and rivers to drain rainwater thereby reducing surface water accumulation and the possibility of waterlogging or flooding. From public perception and observations made by researchers, researchers found an understanding that the level of comfort related to environmental drainage is divided into two. People living in slums along local roads perceive that they are uncomfortable, while people who live on the banks of rivers perceive that they are comfortable with drainage conditions. (Xu et al., 2018)





**Figure 4. Environmental drainage conditions of Dalam Bugis Village**

**D. Clean Water Access Conditions**

The level of comfort of living in the Slum Settlement of Dalam Bugis Village related to the condition of clean water based on public perception is categorized as comfortable. This understanding was obtained by the researcher from the perception of people living in the Slum Settlements of Dalam Bugis Village. Public perception reveals that the comfort of living in slums on the banks of the river is due to easy access to river water. Ease of access to usable water for daily needs is essential for health, well-being, and development, especially in low- and middle-income countries. Based on the results of the researcher's documentation, it is known that there are 4,643 units of rainwater tanks used by 4,643 households and 6 units of refillable clean water sources used by 1,196 households. In addition, many people make a living as boat transportation services. (Marx et al., 2013) (Bugis Dalam Village, 2023)

The community uses river water, rainwater and refillable clean water. River water is used for toilets and livelihoods. The use of river water in riverbank settlements due to economic limitations makes people choose river water because it is free and easily accessible, rather than having to pay for PAM clean water sources. In people who live in slums along local roads based on community perceptions, it is known that they use PAM water, due to the remote access to river water. PAM's clean water source is used as many as 2,367 units which are used by 2,367 households. From this perception, the researcher found an understanding that the comfort of living in the Slum Settlement of Dalam Bugis Village related to the condition of access to drinking water is relatively comfortable, both for people who live in slums on the banks of the river and slum settlements along the local roads of Dalam Bugis Village. (Mayasari et al., 2022)

**E. Wastewater discharge conditions**

The level of comfort of living in the Slum Settlement of Dalam Bugis Village related to the condition of wastewater disposal based on public perception, is divided into two categories, namely comfortable and uncomfortable. This understanding was obtained by researchers from the perception of people living along local roads who are comfortable with the condition of wastewater infrastructure. This perception of comfort is seen from the availability of septic tanks in slum environments along local roads. The availability of septic tanks is critical in domestic waste management, especially in suburban areas that have not yet reached centralized sewer systems. (Arévalo-Durazno et al., 2024)

The perception of people living in slums on the banks of riverbanks reveals that they are uncomfortable with the condition of wastewater disposal. This is because there is no septic tank in this environment, so people only use latrines that lead directly to the river. In line with this perception, the researcher interviewed the Head of the Cipta Karya and Construction Services Division of PUPR Pontianak City, Mr. Edwin Raditya revealed:



*"The installation of WWTP has never been carried out in Beting, because the installation of WWTP must be in a place that is not submerged in water. Meanwhile, in Beting, it can be seen from the area surrounded by the river so it is unlikely to be installed by WWTP." (Mr. Edwin Raditya)*

Beting is the name of a slum settlement area on the banks of the river in Dalam Bugis Village. Mr. Edwin Raditya's expression supports the perception of the public who express discomfort related to the condition of wastewater disposal infrastructure. WWTP (Wastewater Fertilization Plant) has the function of improving environmental cleanliness, reducing water pollution and improving surface water quality. The unavailability of septic tanks on the riverbank indicates the unsuccessful implementation of WWTP and communal septic tanks. The success of the implementation of WWTP depends on the awareness, participation, and continuous education of people in high-density urban areas (Abrauw & Alfons, 2023)

Urban slums in Dalam Bugis Village based on the results of interviews with the community, it is known that people on the banks of the river dump wastewater directly into the river. Both household and sanitation waste. Sanitation waste disposal is facilitated by the availability of latrines in slums on the banks of this riverbank. Based on the data obtained by the researcher from the Bugis Dalam Village Profile, it is known that even though there are areas that do not have septic tanks, all households are facilitated by latrines used by 4,783 families. Researchers found that the understanding that the comfort of living in the Slum Settlement of Dalam Bugis Village related to the condition of wastewater is divided into two. People who live in slums along local roads are comfortable with the condition of wastewater disposal recommendations, while those who live in slums along riverbanks are uncomfortable.

#### F. Waste Conditions

Public perception related to the comfort of living in the Slum Settlement of Dalam Bugis Village based on the condition of waste is divided into two perceptions. First, the perception of comfort of people living in slums on the banks of riverbanks that are uncomfortable. Second, the perception of people living on local roads in slums who say they are comfortable with the condition of waste in the environment where they live. Based on observations made by researchers, riverside slum communities still throw garbage in the river even though there are waste facilities provided by the government. Based on the data obtained by the researchers from the observation results, it is known that there are garbage cans made by the government in the 2019 Kotaku Without Slums program. The garbage cans were placed at several points in slums on the banks of the river.

Based on the Regulation of the Minister of Public Works of the Republic of Indonesia Number 03/PRT/M/2013 concerning the Implementation of Waste Infrastructure and Facilities in the Handling of Household Waste and Similar Household Waste in Article 1, management is the activity of changing the characteristics, composition, and/or integrated waste processing site. Based on this statement, it can be seen that waste processing is carried out at an integrated waste treatment site. In slums along the riverbank, waste management is carried out by means of waste transportation carried out by Beting Permai Waste Bank officers (Pontianak City Environmental Office, 2021). A waste bank is a concept of sorted waste collection. As for people who live on local roads, it is known that they dispose of waste in their place with waste facilities based on the sorting of organic and inorganic waste types. Based on observations in the field of garbage cans with organic and inorganic waste sorting are located in 3 locations of Bugis Dalam Village, namely at the Village Office, in the Jami Sulthan Syarif Abdurahman Mosque and in Gang Berkat. (Amrullah et al., 2023)



Figure 5. Condition of Waste in Bugis Village

## CONCLUSION

The background of the community deciding to live in the Slum Settlement of Dalam Bugis Village, East Pontianak District is influenced by two factors, the first is the economic factor and the second is the factor of land ownership status. Economic factors are influenced by income, type of work and employment opportunities. The factors of land and building ownership status are divided into the status of land ownership and privately owned buildings and the status of non-private land ownership and privately owned buildings.

Public Perception of the Comfort of Living in the Slum Settlement of Dalam Bugis Village, East Pontianak District is seen from the comfort of the building conditions and the distance between buildings, roads, environmental drainage, drinking water access, wastewater disposal, and waste. Public perception related to the comfort of living is divided into two perceptions, namely the perception of people living in riverbank settlements and those living along local roads. Public perception related to the comfort of building conditions and the distance of buildings in the slums of Dalam Bugis Village is categorized as comfortable and the perception of road conditions is categorized as comfortable. The condition of drainage is divided into two perceptions. The first perception by the community in slums on the banks of the river is that it is categorized as comfortable. And second, the perception of people in slums along the local area who are uncomfortable with the drainage conditions of their environment. For the perception of access to drinking water as a whole, the community is categorized as comfortable. Then the perception of wastewater disposal conditions is divided into two perceptions. The first perception by the riverbank community is that they are uncomfortable with the drainage conditions of their environment. Second, people who live along local roads that are comfortable with wastewater disposal conditions in their environment. As well as the overall condition of the waste

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