

Analysis of Problems and Solutions of Slums in Siantar Estate, Huta Melati, Simalungun Regency

Panatar Pakpahan¹, Abdi Sugiarto²

^{1,2}Urban and Regional Planning Study Program, Universitas Pembangunan Panca Budi
Email: abdi_sugiarto@dosen.pancabudi.ac.id

ABSTRACT

This study aims to examine the Analysis of Problems and Solutions of Slum Areas in Siantar Estate, Huta Melati, Simalungun Regency. This study uses a qualitative research design with a phenomenological approach. In this context, researchers seek to understand how people in slums interpret their living conditions and the challenges they face. The research was conducted in the slums of Siantar Estate and Huta Melati, Simalungun Regency. Data Collection Techniques are collected through several techniques, including: In-Depth Interviews Interviews are conducted with residents and community leaders to dig up information about social, economic, and environmental conditions. Data obtained from interviews, discussions, and observations will be analyzed using a thematic analysis approach. Validity and Reliability To ensure the validity and reliability of qualitative research, several steps that can be taken include: Triangulation: Using various data sources (interviews, observations, and documents) to ensure consistency of information. Member Check: Confirm the findings of the study with the informant to ensure the accuracy of the interpretation. Research Results on Population Density and Irregular Buildings: Building density without good spatial planning makes this area vulnerable to fires, floods, and difficulty accessing emergency infrastructure. Inadequate Basic Infrastructure: Damaged roads, lack of drainage systems, and limited access to clean water result in a low quality of life for the population. Poor Sanitation: Inadequate sanitation facilities such as toilets and lack of waste management systems increase public health risks. Unorganized Waste Management: Indiscriminate waste disposal due to the absence of a good waste management system worsens environmental conditions. Poverty Levels and Low Community Incomes: Most citizens work in the informal sector with low incomes, leaving them without the resources to improve housing conditions.

Keywords : Problems, Solutions to Slums and Simalungun Regency.

 This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Corresponding Author:

Abdi Sugiarto,
Urban and Regional Planning Study Program
Universitas Pembangunan Panca Budi
Jl. Gatot Subroto KM. 4,5 Medan 20122, Indonesia.
Email : abdi_sugiarto@dosen.pancabudi.ac.id

Article history:

Received Oct 25, 2024
Revised Oct 29, 2024
Accepted Nov 02, 2024

1. INTRODUCTION

Slums are one of the significant problems in urban and suburban areas, which often arise due to uncontrolled population growth, lack of spatial planning, and limited access to basic infrastructure. In Simalungun Regency, especially in the Siantar Estate and Huta Melati areas, this problem is quite prominent and requires serious attention. The physical condition of the slums in Siantar Estate and Huta Melati is characterized by uninhabitable housing, minimal infrastructure, limited access to clean water and sanitation, and high population density. This creates an unhealthy environment, which has the potential to cause various social and health problems. Local governments and communities in the region face major challenges in dealing with these conditions, while sustainable solutions must be taken immediately. Community involvement in finding solutions, such as in home renovation programs, sanitation improvements, and raising awareness of the importance of a healthy environment, is essential to mitigate this problem. Support from the government in the form of policies, budgets, and the provision of adequate infrastructure are also key factors in solving the problem of slums in this region.

The economic condition of low-income communities results in the inability of people to build or rent decent housing, people prefer to live in slum areas because land prices are quite cheap, people do not care about the poor physical condition of the environment. These conditions often also result in poor health conditions, sources of pollution, sources of disease spread and deviant behavior, which have an

impact on overall city life. Therefore, slum settlements are a product of population growth, poverty and the lack of government in controlling growth and providing adequate urban services. The expansion of urban slum environments has had an impact on increasing the frequency of disasters in urban areas, increasing the potential for vulnerability and social conflicts, decreasing the level of public health, and decreasing the quality of infrastructure services and settlement facilities. For this reason, the slum environment that tends to expand needs to be immediately tanned. Through this research, it is hoped that a livable housing and settlement environment can be realized in a healthy environment.

Housing in slums is usually built informally without proper planning, resulting in an unhealthy, unsafe, and uninhabitable environment. In Siantar Estate and Huta Melati, this phenomenon causes many residents to live in houses that do not meet the eligibility standards. In addition, the lack of basic infrastructure facilities such as roads, drainage channels, and adequate sanitation worsens the quality of life of the people in the area. The problem of slum areas requires serious attention, not only from the local government, but also from the community and other related parties. The slum management program must be comprehensive, including improving the quality of infrastructure, empowering the community, and providing access to basic services. The slums in Siantar Estate and Huta Melati are characterized by the physical condition of uninhabitable buildings, damaged roads, the absence of a good drainage system, and the lack of access to clean water and sanitation facilities. The region's high population density also exacerbates the situation, creating an unhealthy and unsafe environment. In addition, the absence of adequate urban planning and weak supervision in terms of development also worsens the condition of this area. This slum area is a serious problem that affects the welfare of the community, because in addition to the direct impact on health and safety, this condition can also increase social and economic disparities. Therefore, efforts to manage slums in this region require a comprehensive approach, involving various parties, and include infrastructure improvements, increasing public awareness, and policy support from local governments.

The existence of this slum has a negative impact on the quality of life of the community, such as poor health, an unsafe environment, and low socio-economic welfare. In dealing with this problem, the government, the community, and other relevant parties need to work together to find effective and sustainable solutions. Slums are one of the problems that are still faced by almost all cities in Indonesia and even other developing countries. Law No. 1 of 2011 defines slums as uninhabitable settlements due to building irregularities, high building density, and unqualified building quality and facilities and infrastructure. Based on this definition, it can be concluded that slums are uninhabitable and are considered inadequate to support the activities of their residents. There are various kinds of problems that can be caused by slum areas if the growth of the slum environment is allowed to grow. The problem that can be caused is creating inadequate settlements to support the survival of its residents so that it results in a decrease in the welfare, quality and quality of life of the community (Rofina, 2015). According to Subandi (2012), the impact that arises not only includes aspects of the lives of people living in the area but also has an impact on the image of the city which becomes bad and dirty, increases crime and poverty and is susceptible to various diseases.

The slums in Siantar Estate and Huta Melati are a problem that is increasingly prominent in Simalungun Regency. This phenomenon occurs due to poorly planned regional development, rapid population growth, and high economic pressure. Some of the main phenomena that characterize the problem of slums in the area include. **Low Housing Quality** Many houses are built informally, without permits or adequate planning, so they do not meet livability standards. Building structures are often unsteady, poorly ventilated, and many homes do not have access to clean water and electricity. **Poor Basic Infrastructure** Roads are potholes, unpaved and difficult to pass during the rainy season, worsening residents' accessibility to public services such as health and education. **Inadequate drainage systems** cause local flooding during heavy rains, which triggers a deterioration in environmental quality and poses a risk to public health. **Limited access to clean water and sanitation**, where many homes do not have proper toilets or use polluted water sources, increases the risk of disease. **High Population Density** Densely populated settlements with very close distances between houses make this area vulnerable to the spread of disease, fires, and social conflicts. This density also worsens the availability of land for public infrastructure and green open spaces. **Socio-Economic Problems** The majority of the region's population is a low-income group, who rely on informal work with unstable incomes. This economic condition makes it difficult for them to repair their homes or improve their living conditions. **High unemployment rates and low access to education and skills** also exacerbate slum conditions in the area. **Lack of Spatial Planning and Supervision** and the absence of adequate urban planning exacerbate

the problem of informal settlements. Many residents set up their homes on unofficial land or on uninhabitable land, such as along rivers or on hillsides, which are vulnerable to natural disasters such as floods or landslides.

2. LITERATURE REVIEW

Definition of Slum Areas

According to the Ministry of Public Works and Public Housing (PUPR), slum areas are residential areas that do not meet the requirements for health, safety, and comfort, and are characterized by irregular buildings, high population density, lack of public facilities, and poor infrastructure conditions. This phenomenon is common in many cities in Indonesia, especially in areas with rapid population growth but without good spatial planning. Turner (2016) explained that slums are a result of an economic and social process, where low-income people look for affordable housing in urban areas, but do not get access to adequate housing facilities.

Factors Causing Slum Areas

Experts provide various views on the factors that cause the formation of slums, including: Davis (2016) in his book *Planet of Slums* states that poverty is the main cause of the emergence of slums. Economic limitations make people unable to access formal housing or build decent houses. In slums, the majority of the population works in the informal sector with unstable incomes, so they do not have the purchasing power to improve their living conditions. According to Hardoy and Satterthwaite (2019), slums often appear due to weak supervision of spatial planning and buildings. Illegal or unofficial settlement construction often occurs without government intervention, especially in areas far from city centers or on hard-to-reach land.

Impact of Slum Areas

According to UN-Habitat (2016), slums have a significant impact on community welfare. These impacts include: Slums are often centers of infectious diseases due to a lack of access to clean water and adequate sanitation facilities. According to WHO (2017), slums are vulnerable points for the spread of diseases such as diarrhea, cholera, and dengue fever. Friedman (2016) stated that life in slums can affect social cohesion and community stability. Stressful living conditions and economic difficulties often trigger social conflicts, crime, and lower education levels due to limited access to proper educational facilities. Chant (2013) emphasizes that slums hinder economic development because the population is often trapped in low-wage jobs with few opportunities for social mobility. This exacerbates the cycle of poverty.

METHOD APPROACH

This study uses a qualitative research design with a phenomenological approach. Creswell (2014) explains that the phenomenological approach aims to understand individual experiences and how they give meaning to those experiences. In this context, researchers seek to understand how people in slums interpret their living conditions and the challenges they face. The research was conducted in the slums of Siantar Estate and Huta Melati, Simalungun Regency. The selection of this location is based on the high level of poverty, population density, and lack of adequate infrastructure. Benson and McKinley (2016) emphasized the importance of choosing a representative location to obtain valid and relevant data in the context of the research.

Data Collection Techniques are collected through several techniques, including: In-Depth Interviews Interviews are conducted with residents and community leaders to dig up information about social, economic, and environmental conditions. Kvale (2016) states that in-depth interviews allow researchers to gain a deeper understanding of individual experiences and perspectives. Participatory Observation: The researcher also conducts direct observations at the research site to understand the physical and social conditions in the slums. Spradley (2018) explains that participatory observation allows researchers to gain richer context and understand social interactions in the daily lives of residents. Data obtained from interviews, discussions, and observations will be analyzed using a thematic analysis approach. Braun and Clarke (2016) mentioned that thematic analysis is a systematic method to identify, analyze, and report patterns (themes) in data.

Validity and Reliability To ensure the validity and reliability of qualitative research, several steps can be taken, in accordance with the opinions of Lincoln and Guba (2015), including: Triangulation: Using various data sources (interviews, observations, and documents) to ensure consistency of information. Member Check: Confirm the findings of the study with the informant to ensure the accuracy of the interpretation. Researcher Reflections: Researchers note personal experiences and biases that can

influence the interpretation of the data. Research ethics is also an important consideration in this study. Beauchamp and Childress (2013) argue that research must respect the rights and privacy of research subjects. Therefore, the researcher will ensure that all participants provide informed consent before participating in the study and maintain the confidentiality of their data.

3. RESULTS AND DISCUSSION

Problems and Analysis of the Causes of Slum Problems in Siantar Estate, Huta Melati

The slum area in Siantar Estate, Huta Melati, Simalungun Regency faces various problems that are common in urban areas with inadequate infrastructure and environmental conditions. Here are some of the key issues identified:

1. **Building Density**
One of the main characteristics of slums in Siantar Estate is the high density of buildings. Houses in this area are built randomly, without paying attention to the applicable spatial regulations. This leads to a lack of open space, narrow alleys that are not suitable for vehicles to pass through, and difficult access in emergency conditions such as fires.
2. **Inadequate Basic Infrastructure**
The Siantar Estate area also suffers from a lack of proper basic infrastructure. Major problems include: Damaged roads Most of the roads in the region are unpaved or damaged, making them difficult to pass, especially during the rainy season. Poor drainage system irregular drainage causes waterlogging and flooding at some points, especially during heavy rains. Limited access to clean water Many residents have difficulty getting clean water and still rely on shallow wells or polluted river water.
3. **Poor Sanitation Quality**
One of the main problems that has an impact on public health in the region is the poor sanitation system. Most houses do not have proper toilets, so people have to share minimal sanitation facilities and are not kept clean. In addition, poor waste management causes environmental pollution, especially in groundwater.
4. **Ineffective Waste Management**
Waste is one of the significant problems in this region. There is no well-organized garbage transportation system, so garbage is often dumped carelessly around settlements. This causes the environment to become unhealthy, creates unpleasant odors, and becomes a place for diseases to develop.
5. **Poverty Levels and Economic Limitations**
Most of the residents in the Siantar Estate area have low incomes and work in the informal sector. High poverty rates make it difficult to access health and education facilities, and worsen socio-economic conditions in the region. Limited access to better jobs and decent education is also one of the main factors exacerbating poverty in the region.
6. **Limitations of Public Facilities**
Public facilities in this slum area are very minimal, especially in terms of health facilities, education, and playgrounds for children. The lack of proper public space also limits social activities and interactions between citizens.

The problems that occur in the Siantar Estate slums do not stand alone, but are caused by various factors. Here are some of the main causes of the problem that occurs:

1. **Unplanned Urban Development** Siantar Estate is one of the areas that develops without careful planning. Rapid population growth and uncontrolled urbanization led to the formation of settlements without good spatial planning. This makes the area vulnerable to becoming a slum.
2. **Lack of Government Intervention** Lack of attention from local governments in terms of planning and management of infrastructure in this area also exacerbates slum conditions. Improvement programs are often uneven, or do not touch areas such as Siantar Estate significantly.
3. **Public awareness** The low awareness of the community about the importance of maintaining environmental cleanliness also plays a role in worsening slum conditions. The lack of education about waste management and sanitation has caused the behavior of littering and not maintaining cleanliness to become common in this area.

Slum Solution in Siantar Estate, Huta Melati, Simalungun Regency

Solutions that can be implemented to overcome the problem of slum areas in Siantar Estate and Huta Melati, Simalungun Regency. The proposed solution will refer to the analysis that has been carried

out in the previous chapter, as well as refer to theories and practices that have proven effective in similar contexts.

1. **Basic Infrastructure Improvement** Infrastructure improvement is one of the most important first steps to improve the condition of slums. Some of the steps that can be taken include: **Construction of a Clean Water System** Building a water treatment plant to provide access to clean water for residents. **Creating a pipeline network** to distribute water to residents' houses. **Sanitation System Development:** Build proper sanitation facilities such as public toilets and septic tanks to prevent environmental pollution. **Educating the public** about the importance of sanitation and environmental cleanliness. **Road and Transportation Improvements:** Repairing damaged road access and building new roads to facilitate the mobility of residents. Improve the public transportation system to connect slums with the city center.
2. **Community Empowerment Program** Community empowerment is a crucial solution in improving the quality of life of slum residents. Some of the programs that can be implemented include: **Skills Training:** Organizing job skills training that is relevant to market needs, such as sewing, handicrafts, or other technical skills. **Collaborate with training and education institutions** to provide quality programs. **Micro Business Development:** Encourage the establishment of micro businesses by providing access to capital, business management training, and product marketing. **Building cooperatives** to support residents in marketing their products collectively. **Education and Counseling:** Organizing counseling programs on health, hygiene, and the importance of education for children. **Building public awareness** about their rights and obligations in regional development.
3. **Sustainable Spatial Planning** Good and sustainable spatial planning is very important to prevent new slums in the future. Steps that can be taken include: **Preparation of Spatial Plan** Develop a spatial plan that takes into account the needs of the community, the environment, and socio-economic aspects. **Involve the community** in the planning process so that the resulting plan is more suitable for their needs. **Law Enforcement and Policy** Implement policies that strictly regulate land use and infrastructure development. **Avoid unplanned development** that can lead to the emergence of new slums.
4. **Collaboration between the Government, the Private Sector, and the Community** To achieve effective solutions, collaboration between various parties is urgently needed. Some of the steps that can be taken are: **Partnership with Non-Governmental Organizations (NGOs)** Collaborate with NGOs to plan and implement community development programs. **Implementing innovative programs** that have proven successful in other regions.
5. **Increasing Community Participation** Encouraging active community participation in decision-making related to the development and improvement of slums. **Forming a community forum** to discuss problems and solutions faced.
6. **Sustainable Funding** Seek funding sources from the government, the private sector, and donors to support planned programs. **Develop a sustainable funding model** to ensure the sustainability of the program after the initial implementation.
7. **Monitoring and Evaluation** Monitoring and evaluation is essential to ensure that the implemented solutions are effective and can have a positive impact. Some of the steps that can be taken are: **Development of Performance Indicators** Develop clear performance indicators to measure the progress of programs that have been implemented. **Conduct periodic evaluations** to assess the effectiveness of the implemented solutions. **Feedback from the community** Gather feedback from the community on the impact of the program and how improvements are needed. **Involve the community** in the evaluation process to ensure that their voices are heard. **Monitoring Results Report** Compile a report on the results of monitoring and evaluation that can be shared with all stakeholders for transparency and accountability.

After identifying various problems, several solutions can be implemented to address the slums in Siantar Estate. This solution involves the role of the government, the community, and private parties.

1. **Infrastructure Improvement**
The government should prioritize the development and improvement of basic infrastructure in the region, including: **Improving road quality.** **Construction of a better drainage system** to prevent flooding. **Provision of clean water access** through the construction of an integrated clean water network.
2. **Improvement of Sanitation Facilities**

The construction of sanitation facilities such as public toilets and effective waste management systems needs to be the main focus to prevent the spread of diseases due to poor sanitation. In addition, counseling to the community about the importance of environmental cleanliness must be encouraged.

3. Better Waste Management

Local governments must establish an organized waste management system, for example by providing temporary waste disposal sites and regular waste transportation schedules. Recycling and organic waste management programs can also be introduced to reduce the volume of waste.

4. Community Economic Empowerment

Economic empowerment programs, such as skills training and small business capital assistance, can help increase citizens' incomes. By improving the economic level of the community, it is hoped that they will also be able to improve the conditions of their residence.

5. Strengthening the Role of the Community in Environmental Management

Public awareness needs to be increased through environmental education, hygiene campaigns, and the formation of citizen working groups to manage their own environment. With the active participation of the community, the area can be managed better and sustainably.

The problem of slums in Siantar Estate, Huta Melati, Simalungun Regency, requires holistic and sustainable intervention. Cooperation between the government, the community, and the private sector is urgently needed to improve infrastructure, improve sanitation facilities, and empower the economy of citizens. With planned measures, it is hoped that this area can transform into a more livable, healthy, and orderly environment.

4. CONCLUSION

The conclusion of the analysis of the problems and solutions of the slum area in Siantar Estate, Huta Melati, Simalungun Regency, includes an evaluation of the main problems found and strategic steps that need to be taken for improvement. The main problems found in the Siantar Estate slum, Huta Melati, include:

1. Population Density and Irregular Buildings: Building density without good spatial planning makes the area vulnerable to fires, floods, and difficulty accessing emergency infrastructure.
2. Inadequate Basic Infrastructure: Damaged roads, lack of drainage systems, and limited access to clean water result in a low quality of life for the population.
3. Poor Sanitation: Inadequate sanitation facilities such as toilets and lack of waste management systems increase public health risks.
4. Unorganized Waste Management: Indiscriminate waste disposal due to the absence of a good waste management system worsens environmental conditions.
5. Poverty Levels and Low Community Incomes: Most citizens work in the informal sector with low incomes, leaving them without the resources to improve housing conditions.

Overall, the condition of the slum area in Siantar Estate, Huta Melati, Simalungun Regency, requires comprehensive and sustainable intervention. Measures to improve basic infrastructure, sanitation, and community empowerment can have a significant impact on improving the quality of life of residents. Synergy between local governments, communities, and the private sector is urgently needed to create a more livable and sustainable environment in this region.

REFERENCES

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Chant, S. (2013). Women-headed households: Poorest of the poor? Perspectives from Mexico, Costa Rica and the Philippines. *IDS Bulletin*, 28(3), 26–48.
- Creswell, John W, (2014) *Qualitative Research & Research Design*, Yogyakarta, Student Library.
- Davis, K. d. (2016). *Human Behavior at Work*. Organization Behavior 8th Edition.
- Friedman. (2016). *Family Nursing Textbook*. Yogyakarta: Nuha Medika.
- Guba, E.G & Lincoln, Y.S. (2015). *Effective Evaluation*. San Fransisco : Jossey-. Bass.
- Hardoy G, dan Satterthwaite D, (2019) *Urban Growth as a Problem dalam Kirby. J. The Earthscan. Reader in Sustainable Development*, Earthscan.
- Kvale, S., & Brinkmann, S., (2016). *InterViews : Learning the craft of qualitative research interviewing*. Los Angeles: CA : SAGE. Page 2.

-
- Rofina, (2015). Development economy. Yogyakarta: Publisher Unit and STIM YKPN.
- Subandi. (2012). Development Economics. Bandung: Alfabeta Publishing Unit.
- Spradley, James, P. (2018). Ethnographic Method. Jogjakarta: Tiara Wacana.
- Turner, M.J. (2016). Using rational emotive behavior therapy. (REBT) with mixed martial arts (MMA) athletes to reduce irrational beliefs.
- Un-Habitat. (2016). Case Management Ethics: High Professional Standards For Health Care's. Interconnected Worlds. In. Professional Case Management.