


Pattern of Handling Rejuvenation of Slum Areas in the Siantar Estate Huta Melati Nagori Siantar Estate Area, Siantar District, Simalungun Regency

Panatar Pakpahan¹, Abdi Sugiarto² Cut Nuraini³
University Of Pembangunan Panca Budi

ABSTRACT

This study aims to examine the Pattern of Handling Rejuvenation of Slum Areas in the Siantar Estate Huta Melati Nagori Siantar Estate Area, Siantar District, Simalungun Regency. This study uses a qualitative descriptive method that emphasizes the aspect of the natural condition of the object (as opposed to an experiment). Data collection techniques are the means used to obtain the data and information needed to achieve research objectives. Data analysis is a process or effort to process data obtained from the results of interviews, field notes and documentation, into new information so that the characteristics of the data are good. The results of the research on the Existing Condition of the Siantar Estate Huta Melati Area is one of the settlements that show the characteristics of slums. The main problems in this area include poor infrastructure (damaged roads and drainage), uninhabitable buildings, minimal sanitation systems, and limited access to clean water and electricity. In addition, socio-economic problems such as low income and education levels also aggravate environmental conditions. Factors Causing the Emergence of Slums The emergence of slums in Siantar Estate Huta Melati is caused by several factors, including uncontrolled population growth, land limitations, and irregular spatial planning. The low level of community participation in environmental improvement programs and limited access to basic facilities also contribute to the slum conditions in this area.

Keyword : Pattern of Handling Rejuvenation of Slum Areas and Siantar District, Simalungun Regency

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Corresponding Author:

Name, Abdi Sugiarto
Master of Urban and Regional Planning
Universitas Pembangunan Panca Budi
Jl. Gatot Subroto No.km, 4,5 Sumatera Utara 20122
Email : abdi_sugiarto@dosen.pancabudi.ac.id

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1. INTRODUCTION

The issue of slums in each region certainly has differences depending on the characteristics and conditions of settlements, the factors that cause slums in the region. In the case of handling slums in the Siantar Estate Huta Melati Nagori Siantar Estate Area, Siantar District, Simalungun Regency, it is carried out through several stages, including the identification of slums using seven indicators based on the Regulation of the Minister of Public Works and Public Housing of the Republic of Indonesia Number 14/PRT/M/2018 concerning Improving the Quality of Slum Housing and Slums. These indicators include building density, drainage channel conditions, clean water networks, wastewater networks, garbage, road networks and fire rotation. In addition to being reviewed from the physical aspect, it is also identified from the social and economic aspects. From the economic aspect, it is reviewed based on the type of work and the level of society. In addition to being reviewed from the physical aspect, it is also identified from the social and economic aspects. From the economic aspect, it is reviewed based on the type of work and the level of income of the community. Meanwhile, in terms of social aspects, it is reviewed from the level of population density, participation of the settlement community, the level of education and the level of public health. From the results of the identification of the causative factors, the problem can be known so that the level of slum can be determined. The level of slums is seen from the percentage of parameters in each indicator that causes slums. After classification based on the level of slums, a strategy for handling slums in the area can be formulated. Settlements and housing are often equated, but housing indicates a house or building, while settlement focuses on people and their behavior (Nuraini, et al. 2021; Nuraini et al, 2023)

Settlements have a strategic function, namely as an effort to improve cultural development and increase the generation of people in the future. The vision of arranging the settlement environment is directed to encourage the realization of livable settlements and can accommodate community economic activities while still paying attention to regional conditions, potentials, and problems in order to realize

sustainable development. The output produced from the handling of urban slums in slums in the Siantar Estate Huta Melati Nagori Siantar Estate Area, Siantar District, Simalungun Regency has not completely overcome the existing environmental problems. The government needs to pursue an activity in order to create a livable and sustainable residential environment. Efforts that can be made by the government such as organizing socialization to the community so that the community has more insight and knowledge related to the problems in the environment and how to handle them. In addition to socialization activities, real action is needed from the local government, namely by planning programs to alleviate slums in urban areas such as the construction plan for rusunawa, the kotaku program (city without slums), improvement programs or the provision of environmental facilities and infrastructure that are suitable and in accordance with applicable regulations. Therefore, the government and the community need to collaborate to create livable and sustainable settlements.

Urban slum areas are a serious problem faced by many regions, including in Simalungun Regency, especially in Siantar Estate Huta Melati, Nagori Siantar Estate, Siantar District. Slums often arise due to rapid urbanization and are not well managed, resulting in various social, economic, and environmental problems. The area is characterized by poor infrastructure quality, inadequate sanitation, uninhabitable buildings, and limited access to basic services such as clean water, health, and education. This condition not only reduces the quality of life of the population, but also has a negative impact on the economic development and environment of the region. Therefore, efforts to improve the quality of slum areas through various handling patterns, such as regional rejuvenation, are important and urgent. This process aims to create more decent, healthy, and sustainable settlements. Siantar Estate Huta Melati is one of the areas that is the focus in efforts to improve the quality of slums in Simalungun Regency. This area requires special attention in the planning and implementation of the restructuring program in order to have a long-term impact on the lives of the local community. Various aspects such as infrastructure improvement, community socio-economic empowerment, and spatial and environmental management are the top priorities in the rejuvenation of this area.

Pematangsiantar City has a residential environment and slum area with a total area of 154.94 hectares. This is stipulated in the Decree of the Mayor of Pematangsiantar number 050.13/14/12/WK-Year 2021. The 154.94 hectares of residential and slum areas are spread across 22 villages in Pematangsiantar City. Basically, the emergence of slum areas is due to the attractiveness of urban areas that have a high level of service for city facilities. This attraction is further strengthened by the influence of rural (non-urban) areas, namely low service level facilities, narrow job opportunities, difficulty in economic development and decreasing productive land. These two factors affect the desire of villagers to move to the city which causes various kinds of problems, which start from the low knowledge, skills, capital and awareness they have. This condition encourages the emergence of residential areas in urban areas. The existence of slum areas in big and developing cities has become a serious problem for the community and the government both from the perspective of spatial planning, aesthetics, environment, and social. This condition is caused by the existence of a culture of people who like to live in groups and lack consideration of spaces for supporting facilities in residential areas in building houses. As a result, the area that is built does not pay attention to spatial, environmental and social aspects which has implications for giving a picture of a slum residential area.

The development of slums in the Siantar Estate Huta Melati Nagori Siantar Estate Area, Siantar District, Simalungun Regency is very rapid so it needs to be anticipated. In an effort to anticipate the increasing needs of the community, especially community facilities and infrastructure such as housing, infrastructure needs and other needs, so that the local government needs to take the first step by implementing the arrangement of slum areas through this slum-free city program. Siantar District, Simalungun Regency. Siantar Estate Huta Melati, Nagori Siantar Estate is one of the areas that is experiencing slum problems with poor infrastructure conditions, inappropriate residential buildings, and limited access to basic services. The area is also prone to environmental problems, such as flooding, and has difficulties in providing clean water and adequate sanitation. The main cause of the growth of slums in this region is the high rate of urbanization and population growth that is not balanced with the availability of adequate land and public facilities. The socio-economic condition of the population tends to be low, worsening the situation, because many residents do not have the financial ability to repair housing or meet other basic needs.

To overcome this problem, a comprehensive handling pattern is needed in the form of regional rejuvenation. The rejuvenation of slum areas not only aims to improve the physical condition of the environment, but also to empower the community and improve the quality of life as a whole. The right rejuvenation process can include improving basic infrastructure, providing decent housing, and managing open spaces and the environment in a sustainable manner. The handling of slums in Siantar

Estate Huta Melati requires synergy between the local government, the community, and the private sector to create a program that is able to overcome this problem in a sustainable manner. Therefore, this research will focus on the pattern of handling rejuvenation in accordance with the characteristics of the area, including the challenges and opportunities that exist in the field. The slum settlement in Siantar Estate Huta Melati arose due to several factors, including limited land, rapid population growth, and low socio-economic conditions of the community. As a result, the quality of life of the people in this region has become low, and the area is vulnerable to various problems, such as natural disasters (floods), health problems due to poor sanitation, and environmental insecurity. The government has tried to overcome the problem of slums through various programs, one of which is the rejuvenation of slum areas.

The rejuvenation of slums aims to improve the physical and social quality of the environment, as well as empower the community to participate in the development process. In the context of Siantar Estate Huta Melati, a well-planned pattern of handling rejuvenation is needed to create a livable, sustainable, and capable of supporting the socio-economic growth of the local population. So currently the local government has not been able to identify and measure the level of slums with the ability to repair or build houses from residents in Siantar District, Simalungun Regency. Siantar Estate Huta Melati, Nagori Siantar Estate. This inability causes the local government to not be able to do much to help residents repair or build houses. There are still very few local government programs carried out to help the handling process in urban slum areas, especially in Siantar District, Simalungun Regency. Siantar Estate Huta Melati, Nagori Siantar Estate.

2. LITERATURE REVIEW

Slums

According to Yudohusodo (2019), slums are areas that do not have the structural and pattern shape of the housing that should be. Where settlements should have facilities and infrastructure in accordance with the standards that have been set and settlements should have public facilities that can be used by their citizens. Based on the opinion of Budiharjo (2017), slums are residential locations that do not meet standards and can be said to be unsuitable for use as a place to live. Based on the description, there are characteristics of slums that were put forward by Budiharjo, namely the land intended for building house buildings is not in accordance with its designation, the distance of the building is very close to make the density of the building very high, the location which can be said to be unsuitable makes the residents of the slum vulnerable to disease, the low quality of the house building is one of the characteristics of the kumuuh settlement, And the last can be said that there has not been a proper and adequate environmental infrastructure. Slums are often seen as an area that is synonymous with apathetic, overpopulated, insufficient, inadequate, poor, dilapidated, dangerous, unsafe, dirty, substandard, unhealthy and many other negative stigmas (Rahardjo Adisasmita, 2016). This definition is also in line with the opinion of Headline Kuswartojo, namely slums are dense settlements, have low construction quality, minimal infrastructure and services, and poverty (Tjuk Kuswartojo, 2015).

Pattern of Handling Rejuvenation of Slum Areas

Handling slums is one of the national priorities mandated in Law Number 17 of 2007 concerning the National Long-Term Development Plan for 2005-2025. Based on data from the Ministry of Public Works and Public Housing (KemenPUPR) in 2015, there are 38,431 hectares of slum areas in Indonesia spread across 390 districts/cities. (Irawan, Willy. et al. 2018) If the handling of slum areas is not carried out properly, the level of slums can increase. Settlement rejuvenation is carried out to realize better residential environmental conditions and improve the welfare of MBR through structuring and improving the quality of settlements in slum areas. Rejuvenation is carried out by the government and local governments by involving local communities and the private sector. Good cooperation from all stakeholders will support the achievement of the target of zero percent of slums, (Ridlo, Mohammad Agung. 2011) In addition, efforts to drive the community's economy and increase access to housing financing also need to be made so that people living in slums can actively participate in improving the quality of settlements in the area where they live.

3. METHOD APPROACH

This study uses a qualitative descriptive method that emphasizes the aspect of natural object conditions (as opposed to experiments) where the researcher is the key instrument of data collection techniques carried out in a trigulated (combined) manner, data analysis is inductive/qualitative, and the results of qualitative research emphasize meaning rather than generalization (Sugiono, 2019).

Data collection techniques are methods used to obtain the data and information needed to achieve research objectives, (Sugiono, 2017) The data collection techniques carried out in this study are as follows: Namely by making direct observations at the research site to find out the objectivity of the reality in the field. Interviews are intended to obtain information that cannot be obtained through observation. This is because researchers cannot observe the whole thing. Not all data can be obtained by observation, therefore researchers should ask questions to informants.

Data analysis is a process or effort to process data obtained from the results of interviews, field notes and documentation, into new information so that the characteristics of the data become easier to understand and useful for solving a problem, especially related to research. And make conclusions so that they are easily understood by yourself and others, (Sutrisno Hadi, 2018).

In this case, the researcher conducted several data analysis techniques, which are as follows:

1. Data reduction can be interpreted as the process of summarizing, focusing on simplification, abstraction, selecting the main things and discarding unnecessary data that arises from written records in the field.
2. The presentation of this data can be done in the form of tables, graphs, and the like. And in this writing, the researcher focuses more on presenting data using narrative text.
3. The initial conclusions presented at this stage are still provisional, and will change if no strong evidence is found to support them at the next stage of data collection.

RESULTS AND DISCUSSION

Existing Condition of Slum Areas in Siantar Estate Huta Melati

The Siantar Estate Huta Melati area in Nagori Siantar Estate, Siantar District, Simalungun Regency, has the characteristics of a slum caused by various factors. The area presents inadequate physical and social conditions with several major problems, including:

1. **Poor Infrastructure Quality** Settlements in this region have narrow roads that are unpaved and in a damaged condition, which makes it difficult to access transportation, especially in the rainy season. Irregular drainage systems cause waterlogging and flooding when heavy rains occur. Limited access to clean water is also a major problem, with most residents still relying on unhygienic wells.
2. **Most** of the houses in this area are built irregularly without following proper building standards. Many houses have plank-walled, zinc-roofed, and earthen floors. These homes are vulnerable to damage and do not provide enough protection against extreme weather.
3. **Inadequate Sanitation** The sanitation system in this region is very poor. Residents do not yet have proper access to sanitation facilities, and many homes are not equipped with toilets. Household waste is disposed of carelessly, thus polluting the environment and threatening the health of the local community.
4. **Low Community Socio-Economic Conditions** The population in this region is generally low-income and works in the informal sector such as laborers, farmers, or small traders. Low income makes it difficult for them to improve their housing conditions. The low level of education is also an obstacle to improving the quality of life in this region.

The rusunawa development program is one of the government's policies in providing livable housing for low-income people (MBR) in order to reduce the level of slums in urban areas while achieving the Slum-Free City program. The existence of this rusunawa development program has great

potential in order to reduce poverty levels and urban slums. Development is directed to urban development as a form of concern for each other as social beings as well as a solution in order to improve the quality of settlements by providing decent facilities and infrastructure. With this development, it is hoped that it can save people's daily expenses so that people can save and have the opportunity to have a legal residential building. The construction of rusunawa has great potential in building residential areas in a sustainable manner.

The concepts and strategies in each settlement area include:

1. Rejuvenation Handling by rejuvenation is by improving the condition of the building. The improvement of building conditions aims to improve the quality of buildings from semi-permanent conditions to permanent buildings, drainage channel repairs, namely repairs with concrete and widening drainage channels.
2. Handling by rejuvenation and resettlement The rejuvenation process is carried out as contained in the previous description and some areas are relocated (resettlement).

The causative factors that are usually attributed as factors for the emergence of slums are the problem of urbanization, limited urban land, and the implementation of programs from the government that are not on target (Wijaya, 2016). There are two characteristics that reflect the condition of slums, including:

1. These areas are not or are poorly served with proper infrastructure facilities such as road networks, drainage, and waste channels which result in a decrease in environmental quality so that environmental degradation occurs.
2. Uninhabitable housing can be seen from the lack of ventilation, lighting, and building materials that are not suitable for use as building materials.

Siantar District Government, **Simalungun Regency. Siantar Estate Huta Melati, Nagori Siantar Estate** has not had a comprehensive plan in tackling the problem of slums. The determination of the location of slum areas is seen from several perspectives, including the level of urban settlement slums, consideration of land status and population density. Strategies in improving the quality of infrastructure in slum areas consist of:

1. Conducting comprehensive planning program preparation starting from the program plan stage to the funding stage.
2. Improve coordination between all stakeholders involved in the development process.
3. Involving the role and participation of the community.
4. Improving coordination in efforts to utilize space and handle infrastructure in urban slum areas.
5. Organizing socialization to the local community so that the community better understands and is aware of their environmental conditions.
6. Seeking cooperation between private institutions through CSR programs in improving residential infrastructure.

Pattern of Handling Rejuvenation of Slum Areas and Factors Causing Slums in Siantar Estate Huta Melati

Based on data analysis and field survey results, there are several main factors that cause **the Siantar Estate Huta Melati** area to become a slum:

1. **Rapid Population Growth** Population growth in this region occurs without good planning. The movement of people from surrounding villages to this area led to an increase in population density, while the available land was limited. This contributes to the occurrence of irregular settlement development.
2. **Land Limitations and Irregular Spatial Planning** The inability of residents to buy land legally causes illegal development without adequate planning. The absence of a clear spatial layout also worsens the condition of the settlement, because the building stands without following proper development rules.

3. **Limited Access to Basic Facilities** Access to basic facilities such as clean water, electricity, sanitation, and adequate roads is very limited. This leads to a decrease in the quality of life of the community, which also has an impact on the physical environment of the area.]
4. **Low Level of Community Participation** One of the challenges in handling slums in Siantar Estate Huta Melati is the low participation of the community in efforts to improve the environment. Communities are often less involved in the planning and implementation of environmental planning programs due to limited knowledge and resources.

To overcome the problem of slums in Siantar Estate Huta Melati, a comprehensive handling pattern is needed through an area rejuvenation approach. Some of the steps that can be taken include:

1. **Basic Infrastructure Improvement**
 - a. **Improved roads and drainage:** Improvements to major roads and adequate drainage systems need to be made to improve accessibility and reduce flood risk.
 - b. **Clean water supply:** Access to guaranteed clean water sources needs to be expanded through the development of better water distribution systems.
 - c. **Sanitation system improvement:** The construction of sanitation facilities such as public toilets and better waste management systems is urgently needed to reduce the negative impact on public health.
2. **Building Rejuvenation**
 - a. **Rehabilitation of uninhabitable houses:** The government and the community need to work together in building rejuvenation programs by providing renovation assistance for uninhabitable houses.
 - b. **Decent housing development:** In some cases, there is a need for new housing construction with a more orderly and safe design for people living in very slum areas.
3. **Community Empowerment**
 - a. **Education and skills training:** Communities need to be involved in empowerment programs through education and skills training to increase their economic potential.
 - b. **Participation in planning:** Community involvement in regional rejuvenation planning is essential to ensure that the programs are tailored to their needs.
4. **Sustainable Spatial Application**
 - a. **Better spatial arrangements:** Rearranging the area with sustainability in mind needs to be done. This includes more regular zoning for residences, green open spaces, and public facilities.
 - b. **Sustainable environmental management:** Reforestation programs, waste management, and flood control should be integral to rejuvenation plans to improve the overall quality of the environment.

To ensure the sustainability of slum rejuvenation efforts in **Siantar Estate Huta Melati**, several strategies that can be implemented include:

1. **Multi-stakeholder collaboration** Slum rejuvenation requires cooperation between local governments, the private sector, communities, and donor agencies to provide the funding and resources needed.
2. **Strengthening Community Institutions** The establishment of strong and organized community institutions will help in coordinating efforts to improve the area and monitor and maintain the sustainability of the programs implemented.
3. **Long-Term Program Development** Rejuvenation programs need to be designed for the long term, focusing on continuous improvement, infrastructure maintenance, and community economic empowerment to prevent the re-emergence of slums.

4. CONCLUSION

Based on the results of the research on the Pattern of Handling the Rejuvenation of Slum Areas in the Siantar Estate Huta Melati Nagori Siantar Estate Area, Siantar District, Simalungun Regency, it can be concluded as follows:

The Existing Condition of the Siantar Estate Huta Melati Area is one of the settlements that show the characteristics of slums. The main problems in this area include poor infrastructure (damaged roads and drainage), uninhabitable buildings, minimal sanitation systems, and limited access to clean water and electricity. In addition, socio-economic problems such as low income and education levels also aggravate environmental conditions. Factors Causing the Emergence of Slums The emergence of slums in Siantar Estate Huta Melati is caused by several factors, including uncontrolled population growth, land limitations, and irregular spatial planning. The low level of community participation in environmental improvement programs and limited access to basic facilities also contribute to the slum conditions in this area.

Sustainability of Area Rejuvenation Efforts to rejuvenate slums in Siantar Estate Huta Melati require a long-term strategy to ensure its sustainability. It includes multi-stakeholder collaboration between governments, the private sector, and communities. In addition, strengthening community institutions and implementing sustainable spatial planning are important elements in maintaining environmental quality in the future. Pattern of Handling Area Rejuvenation The proposed pattern of handling the rejuvenation of slum areas for the Siantar Estate Huta Melati area includes: Improvement of basic infrastructure such as roads, drainage, sanitation systems, and clean water supply. Rejuvenation of buildings with rehabilitation of uninhabitable houses and the construction of decent housing. Community empowerment through education, skills training, and active community involvement in the planning and implementation of rejuvenation programs. Spatial rearrangement that pays attention to sustainability aspects with the provision of green open space and better environmental management.

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