Pattern of Handling Rejuvenation of Slum Areas in the Bantan Area in Bantan Village, West Siantar District, Pematang Siantar City Edy Saputra¹, Abdi Sugiarto² Cut Nuraini ³

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ABSTRACT

This study aims to examine the Improvement of the Quality of Slum Areas with the Pattern of Handling the Rejuvenation of Slum Areas in the Bantan Area in Bantan Village, West Siantar District, Pematang Siantar City. The method used in this study can be in the form of qualitative descriptive research with a case study approach. This research was conducted in the Bantan Area, Bantan Village, West Siantar District, Pematang Siantar City. The data obtained will be analyzed using a qualitative descriptive analysis method, where data collected through interviews, observations, and documents are analyzed to provide a clear description of the condition of slums and the pattern of handling rejuvenation applied in the Bantan Area. Results of the Initial Conditions of Concern study The Bantan area before rejuvenation faced various challenges, including poor infrastructure, high population density, and low access to basic services such as clean water and sanitation. Implementation of Integrated Handling Patterns The rejuvenation program carried out adopts an integrated handling pattern by paying attention to physical, social, and environmental aspects. Positive Impact on Quality of Life The results of the implementation of rejuvenation show an improvement in the quality of life of the community. Increased awareness of the importance of maintaining cleanliness and environmental sustainability.

Keyword : Pattern of Handling Rejuvenation of Slum Areas

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1. INTRODUCTION

The problem of slums is a problem of handling settlements that is closely related to the procurement of housing for economically weak communities that always arise in big cities. For example, Pematang Siantar City, the area of residential neighborhoods and slum areas stipulated in the Decree of the Mayor of Pematangsiantar No. 050.13/14/12/WK-Year 2021 reaches 154.94 hectares (Ha) and is spread across 22 villages out of 53 villages in eight sub-districts. Bantan District, West Siantar District covers an area of 14.15 Ha. The Mayor's Decree on the Determination of the Location of Housing Environments and Slum Settlement Areas was conveyed by the Acting Head of Public Housing and Residential Areas (PRKP) Kurnia Lismawatie during the discussion of the Draft Regional Regulation (Raperda) on Housing Implementation. The goal is to create ideal and quality environmental conditions so that it can increase community productivity. This is then described in the development conception which focuses on achieving the 100-0-100 target. The handling of slums in Bantan Village, West Siantar District, Pematang Siantar City, is the development of residential environmental infrastructure, such as the construction and improvement of environmental drainage, clean water supply, and waste management. In addition, the construction of various wastewater management infrastructure facilities such as communal septi tanks, toilet washing baths (MCK) and integrated waste treatment plants (IPLT).

Slums are a classic problem that has long developed in Bantan Village, West Siantar District, Pematang Siantar City. Even so, the problem of slums remains the main problem and obstacle for urban development, including in Bantan Village, West Siantar District, Pematang Siantar City. The rapid pace of urban development makes land use increasingly competitive, while on the other hand, urban development becomes an attraction for urbanization which ultimately leads to a high level of demand for housing in the city. In addition, the rapid development of the urban population, which generally comes from urbanization, cannot always be balanced by the city's service capabilities, which has resulted in the expansion of the slum environment. In law number 1 of 2011 concerning Housing and Residential Areas, slums are defined as uninhabitable settlements due to building irregularities, high building density, and the quality of buildings and facilities and infrastructure that do not meet the requirements.

In general, a slum is a settlement with a high level of population density in urban areas that are generally inhabited by poor people / MBR (low-income communities). Pematang Siantar City faces a much more serious slum problem than other areas/districts in Yogyakarta considering the dense population in this area which is very unequal when compared to the availability of land/land to establish livable settlements.

The high level of urbanization and immigration of people from villages to cities has resulted in an increase in the number of people in urban areas, both legally and illegally. The increase in population will also result in the need for settlements. The lower middle class for economic, social, cultural or political reasons decided to move to urban areas and settle down which later developed into slums. The existence of slums can indirectly have a negative impact on the environment that causes natural, social, and artificial pathologies in the surrounding area. If you look closely, the distribution of most of the slum settlements in Pematang Siantar City is in an area spread across 22 villages out of 53 villages in eight sub-districts. It is quite interesting to study how the development of slums that occur in urban areas from time to time. These developments include spatial developments as well as the development of socio-economic conditions of residents. By knowing the growth trend of slums that occur, it is hoped that it can be used as a reference in determining the handling of slums. 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).

The following are the Bantan Area areas in Bantan Village, West Siantar District, Pematang Siantar City:

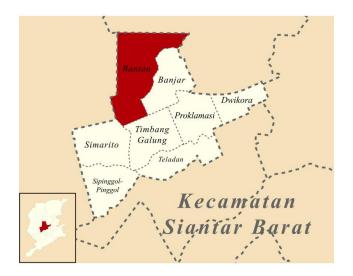


Figure 1.1 Bantan Area in Bantan Village

Pematang Siantar City, especially in West Siantar District, has a fairly large slum area. One of the areas that reflects this problem is Bantan Village. This area experiences problems such as high population density, poor infrastructure quality, and lack of public and social facilities. This condition causes a low quality of life for residents and the potential for health and social problems. To overcome this problem, one of the handling patterns that is considered effective is the rejuvenation of slum areas. Area rejuvenation not only improves the physical condition of settlements, but also improves the quality of life of the community by improving access to public facilities, creating green open spaces, and increasing community participation in development. This rejuvenation effort involves various parties, ranging from the government, the private sector, to the local community.

The problem of slums is a big challenge faced by many cities in Indonesia, including the city of Pematang Siantar. Slums are generally characterized by irregular, unhealthy environmental conditions, and minimal access to basic infrastructure, such as clean water, sanitation, and roads. One of the areas that experienced this problem was the Bantan Area in Bantan Village, West Siantar District, Pematang Siantar City. In these areas, the high population density, low quality of buildings, and poor basic infrastructure conditions cause this environment to become uninhabitable. In addition, slums are often at the center of social and health problems, such as increasing crime rates and the spread of infectious diseases. To overcome this problem, comprehensive and sustainable handling efforts are needed. One of the methods that can be applied is the rejuvenation of slum areas. This rejuvenation involves rearranging the area by improving infrastructure, improving the quality of buildings, and adding proper

public facilities. The pattern of handling the rejuvenation of this area must also involve the participation of local communities and various other stakeholders, such as the government and the private sector, to ensure its success and sustainability. The Bantan area is one of the focuses of government programs in the context of arranging slums in Pematang Siantar City. Therefore, the study of the pattern of handling rejuvenation in this area is important to produce effective, efficient, and sustainable solutions in overcoming slum problems in the area.

Improving the quality of slum areas is an important agenda in urban development to create a more livable, healthy, and sustainable environment. The role of the government, the community, and the private sector is urgently needed to make changes in slums through comprehensive and participatory planning. In the Bantan area, the problems that arise are narrow and damaged road conditions, inadequate drainage, limited availability of clean water, and the accumulation of waste that is not properly managed. To overcome this problem, efforts are needed to improve or improve the quality of slum areas gradually. These efforts can include improving basic infrastructure, such as roads, drainage systems, and the provision of adequate public facilities. In addition, a participatory approach in involving the community is needed so that the solutions implemented are in accordance with local needs and conditions. Responding to the phenomenon of slums requires government involvement. Involving the government through a comprehensive program of activities, including efforts to increase the role of the government to encourage community participation. Therefore, community empowerment can be used as an alternative solution to solve slums in Pematang Siantar City. Empowerment is a concept that aims to give people more responsibility to work. If the authorization is carried out by the employer, leader or team in a structured manner by building a good work culture, it will be successful. The concept of empowerment is related to the concepts of community development and community-based development. Community empowerment can be an alternative solution to overcome slums, because by involving the community in the development process, the community will foster a sense of responsibility and ownership so that they can voluntarily participate in the maintenance of the infrastructure that has been built. (Kholqi, 2020).

2. LETERATURE REVIEW

Slums

According to Tunas and Peresthu (2019), slums are residential areas that develop outside the control of urban planning and are inhabited by low-income communities. They explained that one of the main characteristics of slums is the lack of adequate access to basic services such as clean water, sanitation, and electricity. The region is often the birthplace of complex social and environmental problems, such as criminality and the spread of infectious diseases. Dharmawan (2019) slums are areas characterized by irregularities in spatial planning and development that result in low quality infrastructure. Slums in 2019 are still a major problem in urban areas, especially in developing countries, where low-income residents find it difficult to get access to decent housing. The main factor causing the emergence of slums is rapid urbanization and is not balanced with infrastructure growth. Fadli and Sutardi (2019) define slums as areas that experience environmental degradation due to irregularities in urban land planning and management. They emphasized that slum rejuvenation should include improving physical infrastructure as well as increasing the economic capacity of local communities through active participation in community development programs.

Pattern of Handling Rejuvenation of Slum Areas

According to Turner (2020), the rejuvenation of slums should not only be seen in terms of physical improvement of settlements, but also the improvement of the economic and social capacity of the local community. Fadli and Rahayu (2020) the handling of slum rejuvenation must be carried out through a socio-ecological approach. They propose a handling pattern that emphasizes on: Community-based environmental management, where communities are encouraged to maintain environmental cleanliness independently, such as through waste management and water conservation. Redesign of green open spaces to improve the quality of the environment in slums. Improving the quality of housing by encouraging the community to improve the quality of buildings gradually with technical and financial support from the government. Hendarto and Wijayanti (2020) emphasized that the pattern of handling the rejuvenation of slum areas must be holistic, involving the government, the private sector, and the

community, and focus on improving basic infrastructure, increasing the economic capacity of the community, and strengthening land ownership regulations. A participatory and inclusive approach remains key in ensuring that the solutions implemented are sustainable and acceptable to local communities.

3. METHOD APPROACH

The method used in this study can be in the form of qualitative descriptive research with a case study approach. This approach aims to describe the condition of slum areas in the Bantan area and identify patterns of rejuvenation handling that have been or can be applied to improve the quality of the area. Sugiyono (2017) stated that qualitative descriptive research methods are used to describe existing phenomena systematically and accurately, especially in terms of certain social or physical conditions.

This research was conducted in the Bantan Area, Bantan Village, West Siantar District, Pematang Siantar City. The selection of this location is based on the fact that this area is one of the slums in the city, and the area rejuvenation program is a priority in the city's development plan. According to Creswell (2014), the selection of the research location must be relevant to the research objectives and can provide in-depth information regarding the subject being studied. The subjects of the study include people living in slums, as well as stakeholders involved in regional rejuvenation programs, such as local governments, community organizations, and related agencies. Bogdan and Biklen (2007) stated that in qualitative research, research subjects are chosen purposively, where researchers select participants who are seen as having knowledge or experience relevant to the phenomenon being studied.

The data obtained will be analyzed using a qualitative descriptive analysis method, where data collected through interviews, observations, and documents are analyzed to provide a clear description of the condition of slums and the pattern of handling rejuvenation applied in the Bantan Area.

The steps of data analysis include:

- 1. Data reduction: Simplification of data that has been obtained through the selection of relevant information.
- 2. Data presentation: Presentation of data in the form of narratives, tables, and graphs for easy interpretation.
- 3. Conclusion: After the analysis, the researcher draws conclusions regarding the condition of the slum area and the rejuvenation pattern applied.
- 4. Miles and Huberman (1994) explained that qualitative data analysis involves data reduction, data presentation, and drawing conclusions as important stages in the analysis process.

This research method uses a qualitative descriptive approach that aims to understand the condition of slum areas in the Bantan area and the pattern of handling rejuvenation applied. The data collection techniques used include interviews and observations with descriptive analysis involving reduction, presentation, and drawing conclusions from the data obtained. Data triangulation is used to ensure the validity of the research findings.

RESULTS AND DISCUSSION

Pattern of Handling Rejuvenation of Slum Areas in the Bantan Area in Bantan Village, West Siantar District, Pematang Siantar City

In the research on the Pattern of Handling Rejuvenation of Slum Areas in the Bantan Area, Bantan Village, West Siantar District, Pematang Siantar City, the focus was on the results of analysis and discussion on the implementation of the rejuvenation program in the area. This section aims to outline the data and information obtained from field research, interviews, and related documents, and analyze them to see if the rejuvenation management patterns applied are effective in improving the quality of slums.

Here is a general framework that can be used in the discussion:

- 1. Existing Condition of the Bantan Area Before Rejuvenation In this section, it is necessary to describe the initial condition of the area before rejuvenation is carried out. The results of observations and interviews regarding the physical and socio-economic conditions of the Bantan area can be explained as follows:
 - a. Physical condition of slums: Irregular buildings, materials that do not meet standards, limited access to basic infrastructure such as clean water, poor sanitation, and inadequate drainage systems.
 - b. Socio-economic problems: The majority of citizens work in the informal sector with low incomes, low education levels, high unemployment rates, and environmental health problems such as a high risk of infectious diseases due to dirty environmental conditions.

From the data collected, it can be seen that this area faces serious challenges in terms of infrastructure and quality of life of the community. This condition is in accordance with the characteristics of slums according to the definition of UN-Habitat (2016), where slums are characterized by population density, poor quality of infrastructure, and minimal access to basic services.

- 2. Pattern of Handling Slum Rejuvenation In this section, the researcher explained the pattern of handling slum rejuvenation that has been implemented in the Bantan Area. This pattern involves physical, social, and economic approaches, with efforts made by the government and local communities. Here are some of the strategies identified:
 - a. Basic Infrastructure Improvement: This program is focused on the construction of environmental roads, drainage improvements to overcome flooding, and the provision of clean water and proper sanitation. The city government collaborates with relevant agencies to carry out physical rehabilitation in stages.
 - b. Building Arrangement and Open Space: The rearrangement is carried out to arrange buildings and create green open spaces in areas that were previously dense and disorganized.
 - c. Community Empowerment Program: In addition to physical improvements, community empowerment programs are implemented to improve residents' work skills, provide small business training, and environmental education so that people are more concerned about environmental cleanliness and health.

This pattern of rejuvenation reflects a holistic approach, which focuses not only on physical improvement but also on the development of people's economic capacity. This pattern is in line with Turner's (2020) recommendation, which states that slum rejuvenation must include a socio-economic approach to create sustainable change.

- 3. Evaluation of the Impact of Rejuvenation in the Bantan AreaThis section contains an evaluation of the impacts produced by the rejuvenation program in the Bantan Area, which can be divided into several aspects:
 - a. Impact on Infrastructure Quality: After rejuvenation, there is an improvement in the quality of basic infrastructure, including access to clean water, better environmental roads, and a more regular drainage system. This has a direct impact on improving the quality of life of healthier residents and a cleaner environment.
 - b. Socio-Economic Impact on the Community: With the empowerment program, some residents who were previously unemployed now have new skills and start small businesses. This training program encourages an increase in income and living standards of residents.
 - c. Environmental Impact: Reorganizing the environment by improving waste management systems and creating green open spaces has reduced pollution levels and improved air

quality in the region. The impact can also be seen from the reduction of diseases related to dirty environments, such as diarrhea and skin diseases.

The positive impact of this program shows that the approach to rejuvenating slums in the Bantan area has succeeded in improving the quality of life of the community and the environment. This is in line with the findings of Dharmawan (2020), who emphasized that the rejuvenation of slums must include improving basic infrastructure, health services, and economic empowerment to achieve optimal results.

- 4. Obstacles and Challenges in the Implementation of Rejuvenation Although the rejuvenation program in the Bantan Region has shown positive results, there are still several obstacles and challenges that need to be considered:
 - a. Technical challenges: In some cases, infrastructure development is disrupted by budget constraints and technical issues in terms of immature planning.
 - b. **Limited** community participation: Despite efforts to involve the community in the planning and implementation process, some residents are still passive or less concerned about the importance of this rejuvenation. This is often due to a lack of understanding of the long-term benefits of these programs.
 - c. Land legalization issues: Most of the people in this slum do not have land ownership certificates, which is an obstacle in the replanting process. It also increases the risk of poorly planned forced evictions.

These constraints underscore the importance of better coordination between the government, the community, and the private sector, as well as the need for more intensive counseling on the importance of active citizen participation. According to Fadli and Rahayu (2020), the success of slum rejuvenation is greatly influenced by community awareness and active involvement.

- 5. Recommendations for Improvement for the Future Based on the results of the research, the researcher provides several recommendations for improving the slum rejuvenation program in the future:
 - a. Improved Inter-Agency Coordination: There needs to be better coordination between local governments, the private sector, and the community in terms of planning and executing rejuvenation programs.
 - b. Increased Community Participation: Community counseling and training programs must be further improved to ensure active involvement of residents in maintaining environmental cleanliness and sustainability after rejuvenation.
 - c. Legality of Land Ownership: The government needs to prioritize land legalization programs for residents living in slums so that the rejuvenation process can be carried out more effectively and avoid conflicts in the future.

These recommendations can improve ongoing rejuvenation programs and ensure that the results achieved are sustainable. Land legality and community participation are important keys to the success of this rejuvenation program, as stated by Hendarto and Wijayanti (2020).

Model for Handling the Rejuvenation of Slum Areas in the Bantan Area in Bantan Village, West Siantar District, Pematang Siantar City

The slum management model can be carried out by considering conditions; land status, building density, slum level, conformity with the Spatial Re-Plan (RUTR), so that the existing handling model is, first, settlements on illegal land with the following conditions: (1) high level of slums, (2) the use of land use that is not in accordance with the RUTR. In this condition, the appropriate handling model is urban rejuvenation. Some alternatives that can be used as a form of urban rejuvenation are resettlement, and vertical housing development (flats). Second, slums on legal land with high density. This condition can be overcome by the handling model (1) Land Sharing, which is carried out in conditions where the land area allows. Land rights holders give up part of their land to be regulated, for example used for environmental facilities or public facilities to meet the feasibility of an area. (2) Land consolidation, is a method with development based on the wisdom of land tenure regulation, adjustment of land use with

land use plans or spatial planning and land acquisition for the benefit of development and improvement of the quality of life or maintenance of natural resources. Land Consolidation means a comprehensive arrangement of land whose allocation is still in accordance with the RUTR. Land consolidation is carried out under the following conditions: (1) uncontrolled settlement development, (2) high level of land ownership, (3) high level of slums, (4) tendency to develop towards more potential land functions, (5) communities can be conditioned through a bottom-up process.

Third, slum settlements on legal land that are not dense (not too slum): KIP. The basic principle of village improvement is to improve the environment in slum villages in the city center which are on land owned by the community that has a high density. Fourth, slums on legal land that are not dense. Land Adjusment is carried out in slums that are not too dense. Land owners give up part of their land to be regulated, build basic facilities and infrastructure so that the environment is more organized and used for environmental facilities or public facilities to meet the feasibility of a residential area. In order for slum management to be carried out properly, the slum management model must be based on a strong analysis by paying attention to factors such as regional conditions, population characteristics, land status, building density, slum level, conformity with spatial planning and other factors that support and of course must be supported by valid data, both primary and secondary data by paying attention to effectiveness. efficiency, adequacy, fairness, responsiveness and accuracy of targets. An important point that can be understood from some definitions and definitions of slums according to some experts and laws is that "slums" must be seriously handled with good and appropriate strategies and management models. The existence of urban slum areas can be a serious problem for the community and the government, both from the perspective of spatial, aesthetic, environmental and social aspects. (Yudohusodo, 1995).

Some of the driving factors for the emergence of slums in urban areas are the flow of population urbanization, socio-economic conditions of the community, socio-cultural conditions of the community, and natural physical characteristics. In Law Number 1 of 2011 concerning Housing and Settlement Areas (PKP), it is explicitly stated that one of the scopes of PKP implementation is the prevention and improvement of the quality of slum housing and slum settlements. This is then translated in the form of policies, strategies and programs by various responsible government institutions. According to the Directorate of Cipta Karya, Housing and Settlement Development Program, (1998). Characteristics of the condition of the area that can be applied to the village improvement program: (1) it is in a legal area and in accordance with the Spatial Plan (RTR), (2) the level of density is high, but it is still within the reasonable limit, (3) the quality of the Development of Basic Public Works Facilities (PSDPU) is scarce and limited, (4) there is no need for comprehensive restructuring and resettlement measures, (5) the impact of the problem is local.

4. CONCLUSION

Based on the results of the research on the Pattern of Handling the Rejuvenation of Slum Areas in the Bantan Area in Bantan Village, West Siantar District, Pematang Siantar City, the following conclusions can be drawn: Worrying Initial Conditions The Bantan area before replanting faces various challenges, including poor infrastructure, high population density, and low access to basic services such as clean water and sanitation. This condition creates an uninhabitable environment and has the potential to cause health problems. Implementation of Integrated Handling Patterns The rejuvenation program carried out adopts an integrated handling pattern by paying attention to physical, social, and environmental aspects. The steps taken include infrastructure rehabilitation, community empowerment through skills training, and the arrangement of green open spaces.

Positive Impact on Quality of Life The results of the implementation of rejuvenation show an improvement in the quality of life of the community. Access to better infrastructure, such as decent roads and adequate sanitation, has had an impact on the health and well-being of the population. In addition, skills training programs also help increase income and facilitate community involvement in economic

activities. Increased Environmental Awareness Through active involvement in rejuvenation, the community shows increased awareness of the importance of maintaining cleanliness and environmental sustainability. Mutual cooperation activities and participation in the maintenance of public facilities increased, creating a stronger sense of community. Overall, if the rejuvenation program in the Bantan area succeeds in improving the quality of slum areas and has a positive impact on the community. This success can be used as a model for other slums to improve the quality of life and welfare of the community. With continued commitment and support, this rejuvenation is expected to provide long-term benefits and build a better foundation for the future.

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