# Planning to Manage The Slum Area in Tanjung Tiram Village, Tanjung Tiram Subdistrict, Batubara District

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**Abstract:** The problem of urban slums was often one of the main issues that is quite polemic, thus never overtaken by the handling efforts from time to time. Particularly, the impact of slum settlements will also lead to a bad paradigm for the administration of the government, by giving the negative impact of the helplessness and inability of the government in the regulation of life services and livelihoods of its citizens. The Problem of Slum Settlement was also experienced by the Batubara District, especially in Tanjung Tiram Village, Tanjung Tiram Subdistrict. The aim of this research is to identify the physical condition of slum settlement, analyze the slum level of settlement and analyze the planning of handling. This research was a descriptive study of qualitative analysis in which researcher describes the phenomenon, which exists by analyzing and presenting the facts systematically to facilitate understanding and drawing conclusions. Based on the result of the research, it is concluded that the physical condition of slum settlement and rearrangement, the result of analysis for slum level of settlement in TanjungTiram subdistrict is medium slum, and the result of analysis for handling planning is model of village improvement program (KIP) and land consolidation model (Land Consolidation).

Keywords: Planning, Handling, and Slum Areas

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## I. INTRODUCTION

Slums are a problem faced by almost all cities in Indonesia and even large cities in other developing countries, and this region is an neglected part of urban development. The root problem of slums is more complex, namely because of neglegiance in developing marginal urban spaces; weak city management; there is no introduction to the need (housing need assessment) and housing stock evaluation (housing stock evaluation) as a whole and participatory; and the absence of the development of a full delivery system (housing delivery system). Many urban problems are rooted in residential areas, such as the uneven distribution of urban settlement infrastructure, the unavailability of a decent settlement environment, etc. which ultimately has implications for the creation of slums in urban areas. Problems arising from the emergence of slum areas such as unhealthy environment, illegal land use, etc. not only affect the internal area itself but also to the surrounding area and urban infrastructure network systems in general.

In terms of residential space utilization, slum settlements are defined as residential areas that are not habitable with irregular building conditions, have a high level of building density, with the quality of buildings and facilities and infrastructure that do not meet the requirements. The use of the slum settlements is often in a space that is not in accordance with its original function so that it becomes a function of settlements, such as the emergence of settlements in the border area for the needs of green spaces or lands that are not in accordance with their designation (squatters). This situation shows that the residents are less able to buy and rent houses in urban areas with high prices of land / buildings, while vacant land in urban areas is gone. These settlements arise with inadequate facilities and infrastructure, poor housing conditions with high density and threaten the health, safety and comfort of residents.

The problem of slum settlements is also experienced by the District of Coal, especially in the Tanjung Tiram Village, Tanjung Tiram District. According to the Regent of Batu Bara Decree regarding the determination of the location of residential and slum neighborhoods in Batu Bara Regency the slum area in Tanjung Tiram District is 71.2 hectares.

In an effort to anticipate the increasing needs of the community, especially community facilities and infrastructure such as housing, social services, transportation, clean water and others. The regional government has taken the initial steps by implementing a slum settlement arrangement in several places in the Batubara

Regency. The Coal Regency Government has decided and determined to carry out efforts to develop the city's physical space and improve the quality of the city's physical infrastructure.

Based on the Detailed Spatial Plan (RDTR) of Tanjung Tiram Subdistrict, Tanjung Tiram Subdistrict is intended for settlement, trade and service activities. According to Daljoeni (2003), with the concentration of trade activities this will cause problems for the structure of urban planning. These settlements are very fast becoming dense settlements with a diversity of land use functions. The development of the number of settlements in these settlements is less balanced by the availability of land, so to increase the number of occupancy they tend to ignore the basic rules regarding the procurement of house buildings such as the quality of materials, type of space, road boundaries and distance between houses. In fact, they use the river side of the river to build residential buildings so that the settlements become slums and an disorderly atmosphere which results in changes in the physical quality of the area.

Physically the problem of slum settlements that appeared in Tanjung Tiram Subdistrict, Tanjung Tiram Subdistrict, Batubara Regency was the spread of occupancy with conditions of building irregularities, building density, lack of environmental infrastructure and declining environmental quality.

According to Law No. 1 of 2011 that everyone has the right to live physically and spiritually, live, and get a good and healthy environment, which is a basic human need, and which has a very strategic role in the formation of national character and personality as an effort to build human Indonesia as a whole, self-sufficient, independent and productive. The role of the government in this case is to create a conducive climate so that residents can more quickly occupy habitable homes.

Based on the things mentioned above, it is necessary to conduct a study on "Planning for Slum Settlement Areas in Tanjung Tiram Subdistrict, Tanjung Tiram Subdistrict, Coal Regency" as a solution for handling settlements.

## II. RESEARCH METODOLOGY

#### Method

This research method is descriptive qualitative, using the main data disclosure tool is observation (primary data sources), interview study support techniques and documentation (secondary data sources), as well as maps of satellite imagery. According to Arikunto (2010: 3) stated that, descriptive research is research that is intended to investigate the circumstances, conditions or other things that have been mentioned, the results of which are presented in the form of research reports.

#### Stage of Research

This research was conducted using a survey approach, namely primary survey and secondary survey. According to Arikunto (2010) in Chairul Abidin (2017), the survey approach is the activity of collecting as much data as possible about the facts that are supporting the research, with the intention of knowing the status and symptoms.

#### Data Analysis

Data analysis in this study used descriptive and spatial analysis (spatial) to determine slum conditions and determine the planning of handling slum areas, based on the Quality Improvement Guidelines on Slum and Slum Settlements by the Directorate of Settlements of the Directorate General of Human Settlements of the Ministry of Public Works. Indicators of physical conditions in slum areas measured in this study include: (1) Building Conditions (2) Environmental road conditions; (3) Conditions for drinking water supply; (4) Environmental drainage conditions; (5) Conditions for waste water management; (6) Condition of waste management; and (7) Fire protection conditions.

## **III. RESEARCH RESULTS AND DISCUSSION**

Identification of slum conditions in slum areas in Tanjung Tiram Subdistrict, Tanjung Tiram Subdistrict, Coal Regency which is the object of research is carried out by giving scoring on variables, indicators and predetermined items, namely physical conditions which include: (1) Building Conditions (2) Environmental Road Conditions; (3) Drinking Water Provision Conditions; (4) Environmental Drainage Conditions; (5) Management Conditions Wastewater; (6) Waste Management Conditions; and (7) Fire Protection Conditions. Assessment of each physical condition uses a range of values / scores with large differences, namely values 5, 3, and 1. This is done so that the slum value obtained, there is a clear difference between slum conditions with heavy slum area categories, regions moderate slums and light slums. While the meanings of each of these values are:

a. Value 5 represents a very bad condition on the item being assessed, with the percentage of parameter conditions / service levels in the range of 76% - 100%.

b. Value 3 represents a fairly bad condition on the item being assessed, with the percentage of parameter conditions / service levels in the range of 51% -75%.

c. Value 1 represents a bad condition on the item being assessed, with the percentage of parameter conditions / service levels in the range of 25% -50%.

The assessment of the results of observations and interviews on each item is summed, so that the total value of each indicator is known, and the value of each indicator is summed so that the value of each indicator is known. The values of each indicator are added back so that the total value that shows the slum condition in the slum area is obtained. Based on the results of field observations (observations) and supported by the results of interviews with the community, it can be seen the slum condition in Tanjung Tiram Village, Tanjung Tiram District, Batubara Regency.

Indicator of Physical Condition	Criteria	Numeric	Unit	Prosen	Value
1. Building Conditions	a. Building Irregularities	237	Unit	57 %	3
	b. Building Density Level	40	Unit	0 %	0
	c. Incompatibility with Technical Requirements	237	Unit	57 %	3
2. Environmental Conditions of the	a. Coverage of Environmental Road Services	0	На	0 %	0
Road	b. Quality of the Road Environment	1.555,8	Meter	2 %	0
3. Conditions for Provision of	a. Availability of Safe Drinking Water Access	423	KK	77 %	5
Drinking Water	b. Not fulfilling Drinking Water Needs	423	KK	100 %	5
4. Conditions for	a. Area of Inundated Area	3	На	51 %	3
Environmental	b. Drainage unavailability	3	На	40 %	1
Drainage	c. Unrelated to the Urban Drainage 3		На	0 %	0
	d. Not Maintained Drainage	3	На	2 %	0
	e. Quality of Drainage Construction	3	На	2 %	0
5. Wastewater Management Conditions	a. Wastewater Management System is not in accordance with Technical Standards	4,96	На	85 %	5
	b. Wastewater management infrastructure and facilities are not in accordance with technical standards	4,96	На	85 %	5
6. Conditions for Waste Management	a. Solid Waste Infrastructure and Facilities Are Not In Accordance With Technical Requirements	2,97	На	51 %	3
	b. Solid Waste Management System Not In Accordance with Technical Standards	2,97	На	51 %	3
	c. Waste Management Facilities and Infrastructure Are Not Maintained	2,97	На	51 %	3
7. Fire Protection Conditions	a. Unavailability of Fire Protection Infrastructure	2,97	На	51 %	3
	b. Unavailability of Fire Protection Facilities	2,97	На	51 %	3
		Total Value			46
		Level of Slumness			KS

 Table 1 Assessment of Physical Conditions of Sores in Tanjung Tiram Subdistrict

Source: Results of Observation Assessments and Field Interviews

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Settlements belonging to slums are irregular, unplanned settlements and declining quality of settlements. This can be identified using the criteria for non-economic vitality and infrastructure conditions in the settlement. In this study the author uses a standard level of slum based on the Regulation of the Minister of Public Works and Public Housing Number 2 of 2016 there are 3 (three), namely:

1) Level of mild slum ie interval between 19-44;

2) Medium slum rate, which is the interval between 45-70; and

3) Severe slum rate, which is the interval between 71-95.

From table 1 it is known that the slum level of Tanjung Tiram Village is 46. So, it can be concluded that the level of slum in the Tanjung Tiram Village is a moderate slum rate, which is an interval between 45-70.

The results of identification and slum level based on spatial analysis (spatial) in Tanjung Tiram Village, Tanjung Tiram District, Batubara Regency can be seen that the model plan for handling slum areas in Tanjung Tiram Village is a village improvement program model (KIP) and land consolidation model (Land Consolidation) because the level of slum in the Tanjung Tiram Village is a moderate slum level.

Village improvement program (KIP) A program that aims to improve the quality of life and greening the community through physical environmental improvements. The main objective is to improve the health of the village environment. The basic component is the improvement of regional infrastructure such as road vehicles, walkways, drainage channels, MCK (Budi Prayitno, 2015).

Land consolidation is a form of activity concerning land use management by way of rearranging land use and mastering land parcels. The goal of land consolidation itself is to restructure the use and control of land in an area whose condition is considered to be less than qualified to become a better area (Indra, 2012).

Land consolidation is an integrated activity rearranging (a) an irregularly organized region, complete with the necessary infrastructure and facilities, to achieve optimal land / land use which in principle is carried out on self-help by the community itself.

Observed	Problem	Handling Planning		
Aspects		Increased	Prevention	
Building	<ul> <li>Irregularity of buildings around</li> <li>Some are in the river border</li> <li>Buildings that do not meet the building technical requirements</li> </ul>	<ul> <li>Supervision and control of suitability of licensing, suitability of spatial planning (RTRW)</li> <li>Community empowerment in the management and maintenance of residential environments</li> </ul>	<ul> <li>Returning regional functions according to designation</li> <li>Control and limit the development of settlements</li> <li>Improvement, rebuilding into habitable settlements</li> <li>Uninhabitable housing assistance programs for MBR</li> <li>Planning and construction of settlement sapras</li> </ul>	
Road	- There is a damaged	- Monitoring dan	- Repair of road construction	
Environment	road on Jalan Bagan Dalam	control - Maintenance	- Road widening	
Drinking Water	<ul> <li>The unavailability of safe access to drinking water</li> <li>Water requirements of 60 liters / person / day have not been met</li> </ul>	<ul><li>Monitoring and monitoring</li><li>Maintenance</li></ul>	<ul> <li>Increased PDAM production capacity</li> <li>Expansion of service areas</li> <li>Planning of drinking water supply channels</li> </ul>	
Environmental Drainage	<ul> <li>There are some points that experience inundation when it rains</li> <li>There are still unserved drainage settlements</li> <li>Sedimentation of drainage</li> </ul>	<ul> <li>Monitoring and monitoring</li> <li>Maintenance</li> </ul>	<ul> <li>Repair of environmental drainage channels</li> <li>Planning and Construction of environmental drainage</li> </ul>	
Waste Water	Waste water disposal is	- Socialization and	- Construction of a	
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Table 2 Matrix of Slum Settlement Zone Handling Planning in Tanjung Tiram Village

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Observed	Problem	Handling Planning		
Aspects		Increased	Prevention	
Management	not served and does not meet technical requirements	<ul><li>counseling on health and environmental issues</li><li>Monitoring and monitoring</li></ul>	Communal WWTP - Construction of MCK - Aid for toilet construction	
Waste Management	<ul> <li>Low public awareness about clean and healthy living behavior</li> <li>Unmanaged waste management</li> </ul>	<ul> <li>Socialization and counseling on health and environmental issues</li> <li>Giving administrative sanctions</li> <li>Maintenance</li> </ul>	<ul> <li>Adding solid waste sapras</li> <li>Peningkatan pengelolaan persampahan</li> <li>Improved waste management</li> <li>Construction of temporary landfills</li> </ul>	
Fire Protection System	Areas that do not have a fire protection system	<ul> <li>Information on fire hazards</li> <li>Arrangement of settlement environment</li> </ul>	<ul> <li>Provision of fire protection Sapras</li> <li>Increased accessibility for fire protection cars</li> </ul>	

Source: Analysis Results



Figure 1 Slum Area Settlement Handling Plan Plan

## **IV. CONCLUSIONS AND SUGGESTIONS**

Based on the results of the research and analysis and the discussions that have been conducted, the following conclusions can be drawn:

- 1. The physical condition of the slums in Tanjung Tiram Village shows that there are building irregularities, the presence of damaged roads, the lack of clean water needs, uncared and underserved drainage, household waste disposal that is not in accordance with technical requirements, solid waste management systems which is not in accordance with technical requirements, and there is no fire protection.
- 2. The level of slum in the Tanjung Tiram Subdistrict according to the Minister of Public Works and Public Housing Regulation Number 2 of 2016, is a moderate level of slums.
- 3. Planning for handling slum areas in the Tanjung Tiram Subdistrict is to repair and structured slum areas with a model plan for village improvement programs (KIP) and land consolidation models (Land Consolidation).

From the conclusions stated above, suggestions that can be given to strengthen and refine the planning and handling of slum areas are as follows:

- 1. The District Government of Coal needs to immediately improve physical conditions and organize slum areas in Tanjung Tiram Village, namely:
  - 1) Arranging the condition of the building to be more orderly, especially in the river border
  - 2) Repair and improve the quality of damaged roads;
  - 3) Improve clean water services;

4) Repair and improve the quality of damaged drainage and build drainage for areas that have not been served drainage;

5) Building communal WWTPs for wastewater treatment;

- 6) Add waste facilities and infrastructure; and
- 7) Build a water Hydrant to prevent fire
- 2. The District Government of Coal is expected to be able to reduce the level of slum in the Tanjung Tiram Village by improving physical conditions and managing the conditions of buildings in slum areas.
- 3. The District Government of Coal needs to immediately develop a master plan for handling slums in a comprehensive manner by involving relevant agencies, the private sector and the community with a model plan for village improvement programs (KIP) and land consolidation models (Land Consolidation).
- 4. The District Government of Coal needs to issue local regulations that regulate community behavior in protecting the environment along with sanctions and socializing.
- 5. It is expected that the maps that have been made in the writing of this thesis can be a location reference in the repair and structuring of slums in Tanjung Tiram Subdistrict.

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