

Slum Area Improvement Program Based on Social Categories in Binjai City

Muhammad Taufik Rangkuti¹, Abdi Sugiarto², Abdiyanto²

Email: tiba.alsaman@qu.edu.id

¹Student of Master's Program in Urban and Regional Planning (MPWK) Universitas Pembangunan Panca Budi (UNPAB), Medan, North Sumatra

²Lecturer of the Master's Program in Urban and Regional Planning, Universitas Pembangunan Panca Budi (UNPAB), Medan, North Sumatra

Abstract

This research aims to identify the socio-economic characteristics of the community in the Binjai Kota District, especially in the Kartini Region. It involves categorizing areas based on social and economic categories within slum areas and formulating appropriate handling strategies. The research methodology used is the SWOT Model with a descriptive and qualitative approach. Purposive sampling is employed for sample selection and informant determination. Overall, the socio-economic category of the community in the slum area tends to show low levels, as manifested in the majority having elementary school education, the dominance of laborers and farmers in the job sector, and low income levels, including land ownership with limited legality. However, there are some socio-economic categories that indicate better conditions, such as the productive age of household heads, housing density in accordance with standards, sanitation and clean water availability, and building ownership. Considering these findings, the slum area improvement program based on social categories proposed in this research should focus on strategies involving the implementation of development missions, community skill enhancement, sanitation preservation, building maintenance, and the development of non-governmental organizations. It should also encompass community empowerment, job diversification, cooperation for land ownership legality, drainage improvement, community awareness enhancement, and holistic assistance. This involves the government in the implementation of environmental cleanliness programs, collaboration between the government, regional authorities, and the community, as well as the maintenance of public facilities, improvement of community institutions, involvement of regional government within budget constraints, and collaboration between the government and the community in area arrangement.

Keywords: Program, Slum Area Improvement, Social Category, SWOT

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Introduction

Based on the latest information from the Central Statistics Agency (BPS), as of mid-2023, the population of Indonesia has reached 278.69 million people. This reflects an increase of 1.05% compared to the previous year. In mid-2022, Indonesia's population was recorded at 275.77 million people, experiencing uneven population distribution (BPS Indonesia, 2023). Economic difficulties in rural areas and economic disparities between regions and urban centers have led to urbanization, with nearly 50% of the population residing in urban areas. This excessive urbanization has caused various issues, including an increase in slum settlements, poverty rates, and urban crime (BPS Indonesia, 2023) and (Azhar & Dewata, 2018).

In Indonesia, particularly in cities in developing countries, the issue of slum settlements has become complex. Uneven urbanization has resulted in disparities in the growth of development facilities between cities and rural areas. The Indonesian government, through the Sustainable Development Goals program, seeks to address this issue by eliminating slum settlements in every city and region. However, as of now, this goal has not been achieved (Budiyono & Suryana, 2019), (Cathrine, 2022), and (Deni Irawan & Hidajat, 2018; Abdiyanto, 2015).

In the context of slum settlement planning, social, cultural, economic, and political factors significantly influence the conditions of settlement areas. Identifying these problems requires continuous planning over time. The main constraint in slum settlement planning is the lack of understanding of suitable settlement standards from both physical and social aspects (Defiana, 2016).

The city of Binjai in North Sumatra serves as a case study. Binjai is one of the cities in North Sumatra known for its trading activities. This is due to its strategic location on the Sumatra crossroad route. This route connects the province of Aceh with cities and regencies in North Sumatra, such as Medan and Langkat. Binjai is located at latitude 3 degrees 31'40"-3 degrees 40'2" North and longitude 98 degrees 27'3"-98 degrees 32'32" East. Binjai is situated at an elevation of 28 meters above sea level and covers an area of 90.23 km². It is surrounded by two large regencies, Langkat and Deli Serdang.

Facing the issue of slum settlements, Binjai city is attempting to address it through interventions at the environmental and regional levels. The social and economic conditions in specific areas, such as the Kartini Region in Binjai city, influence the culture and customs of the local community. The success of slum settlement planning requires a deep understanding of the socio-economic conditions and planning based on specific categories (Fauzi, 2023). This research is expected to provide concrete recommendations for slum settlement planning, considering the conditions and socio-economic categories of the community in Binjai city.

Theoretical Study

The term "slum" has a complex and imprecise meaning, even though the United Nations provides both official and unofficial definitions for "slum areas," referring to urban areas with inadequate housing and poverty without secure living conditions. This term reflects the impact of major projects such as industrialization and urbanization over the past three centuries. Slum settlements, often informal and unorganized, contrast with organized societies (Deni Irawan & Hidajat, 2018), (Octavionesti & Mardiansjah, 2017), and (Saputro, 2022).

The term "slum" is commonly used to describe various settlements with poor living conditions and low income, reflecting manifestations of poverty. Traditional definitions state that slums were initially decent but deteriorated after the original inhabitants moved to better urban areas. Over time, the conditions of old houses worsened, and slum areas in many cities, both in developed and developing countries, became common examples according to (Nafsi, 2019), (Juita & Adiwidjaja, 2018), and (Joenso & Sari, 2020).

Government regulations state that slum housing experiences a decline in the quality of its function as a dwelling place, often due to irregularities, high building density, and inadequate building and infrastructure quality (Tarigan, 2005). Slum settlements can occur in urban areas, whether planned or not. The physical category of slum settlements involves crowded living conditions, houses unsuitable for the number of occupants, and irregular settlement layouts (Wijaya, 2016), (Yenny, 2009), and (Yunus, 2005).

Slum areas often have high population density, uninhabitable houses, and poor environmental sanitation. Further definitions state that "slum" can be defined as a housing unit with at least five to ten people or the smallest unit with at least 25 people, often developing on state-owned land or vacant private property. Slum settlements are often inhabited by individuals with low socio-economic status and a lack of ownership guarantees (Wet & Dhris, 2002), (Wijaya, 2016), (Surtiani, 2006), and (Sari & Ridlo, 2022).

Criteria for determining slum settlements involve poor physical conditions, low income, and a lack of desire from the general public (Hamzah & Sudra, 2000). Factors causing slum settlements include building and environmental categories, lack of public facilities and plans, as well as variables such as proximity to city centers, low economic capacity, irresponsible environmental lifestyles, and disaster-prone areas. Insufficient government efforts can exacerbate the situation (Cresswell, W, Clark, & Plano., 2007), (Defiana, 2016), and (Octavionesti & Mardiansjah, 2017).

Urban areas play a central role in a country's politics, social, cultural, and economic aspects. The morphology of a city is influenced by housing, reflecting civilization and social values (Joenso & Sari, 2020). Slum settlements often lack access to basic services, posing serious challenges involving physical, economic, and social aspects. Slum areas, in both developed and developing countries, exhibit poor housing conditions, high density, and limited access. Various definitions state that slums are environments experiencing a decline in physical, economic, cultural, and locational quality (Srinivas, 2003; Sugiarto & Ramadania, 2023). Factors such as social inequality, lack of infrastructure, and financial disempowerment worsen conditions in slum settlements. People living there often face health problems, malnutrition, and economic limitations. Community empowerment is key to addressing these issues, allowing them to actively participate in improving their environment and quality of life (Joenso & Sari, 2020) and (Deni Irawan & Hidajat, 2018).

Group analysis is used to understand the complexity of data structure, validate cluster analysis results, and group objects based on available measurements. Community empowerment and the integration of sustainable programs are needed to comprehensively address slum settlement issues. The importance of social aspects in urban development requires an approach involving the entire community. Sustainable development includes local economics, income improvement, and active community participation. Housing policies must go beyond mere physical improvements, involving the informal sector and providing easy access to employment. In responding to slum issues, social strengthening and community participation are crucial for sustainability and integration. Community empowerment can help them overcome poverty, understand environmental quality standards, and achieve a better life. This approach supports the goals of sustainable development to create economically, socially, and environmentally independent and comfortable communities (Joenso & Sari, 2020), (Sari & Ridlo, 2022), (Supartini, 2003), and (Thamrin, 2012).

The planning and prevention of slum settlements require appropriate, targeted, and effective programs. According to (David, 2010), programs are a key element in the success of an organization. Program definitions are also provided by (Barney & William, 2008), (Barney & Hesterly, 2015), and (Hitt, Ireland, & Hoskisson, 2001), all emphasizing the importance of programs as a set of integrated actions to achieve excellence. SWOT analysis, as explained by (Kotler P. &., 2009).

Methods

This research aims to identify the socio-economic categories of the community in the Slum Area of the Kartini Region, Binjai Kota Subdistrict. It involves analyzing slum area clusters based on the socio-economic conditions of the community in the Kartini Region and formulating a Slum Area Improvement Program based on the socio-economic categories of the community in the Kartini Region, Binjai Kota Subdistrict. The study was conducted in the Kartini neighborhood, Binjai City, North Sumatra, with a survey as the primary method of data collection through questionnaires and field observations. This research utilized primary data from the survey with questionnaires and field observations, focusing on respondent characteristics such as age, gender, length of residence, occupation, education level, and income, as well as infrastructure conditions (Hesse & Biber, 2010; Abdiyanto, 2020). Primary data also included information on the condition of house buildings, including layout, distance, physical quality, and building density.

On the other hand, secondary data served as research data sources from institutions such as Bappeda, Public Works Department, and BPS, used to support hypotheses and provide additional descriptions of the research area. This involved the suitability of the location of Binjai City's slum area and planning documents related to the slum area improvement program in Binjai City. SWOT analysis was employed to identify strengths, weaknesses, opportunities, and threats in addressing slum area issues. The research period began in June 2021 and concluded in June 2022 (BPS Indonesia, 2023).

Results and Discussion

This research was conducted in the city of Binjai, specifically in the Kartini Area, a region located in North Sumatra. Binjai has a reputation as a trading center since ancient times due to its strategic position as a crossroads in Sumatra. This route connects the city and regencies in North Sumatra, such as Medan City and Langkat Regency, with the Aceh Province. Geographically, Binjai is situated at 3 degrees 31'40"-3 degrees 40'2" North Latitude and 98 degrees 27'3"-98 degrees 32'32" East Longitude, with an elevation of 28 meters above sea level and a land area of 90.23 square kilometers. Binjai is located between two major regencies, namely Langkat Regency and Deli Serdang Regency, and borders several areas in North Sumatra, such as Binjai and Hamparan Perak Districts to the north, Sunggal District to the east, Sei Bingei and Kutalimbaru Districts to the south, and Selesai District to the west. Binjai is divided into five districts, namely South Binjai, Binjai City, East Binjai, North Binjai, and West Binjai. The issue of slum settlements poses a challenge for cities in North Sumatra, including Binjai, as described in the Mayor of Binjai's Decree No.188.45-1226 IK/year 2021. The settlement area in the Kartini Area, Binjai City District, is greatly influenced by social and economic conditions. These social and economic conditions affect the culture and customs of the community in the Kartini Area, especially in slum settlement areas. Social grouping patterns occur because Binjai is a multi-ethnic city, dominated by the majority of Malay and Batak ethnicities. The habit of living in groups and gathering in small environments forms a dense settlement pattern, with unclear boundaries between one house and another, as stated by RPLP (2018) (Directorate General of Housing and Settlements, 2002) and (Directorate of Settlement Development, 2014).

SWOT Analysis

The investigation into Slum Settlement Arrangement in Binjai City, especially involving Social Categories, is implemented through three steps of SWOT analysis, namely IFAS Dimension (Internal Factor Analysis Summary), EFAS Dimension (External Factor Analysis Summary),

and the SWOT matrix. First, the internal dimension includes an evaluation of the social conditions of the community, their economic situation, and factors triggering slums. Meanwhile, the external dimension includes a review of government policies and programs, as well as political conditions that may influence slum settlement arrangement efforts in the region, further explained in Figure 1. Below:

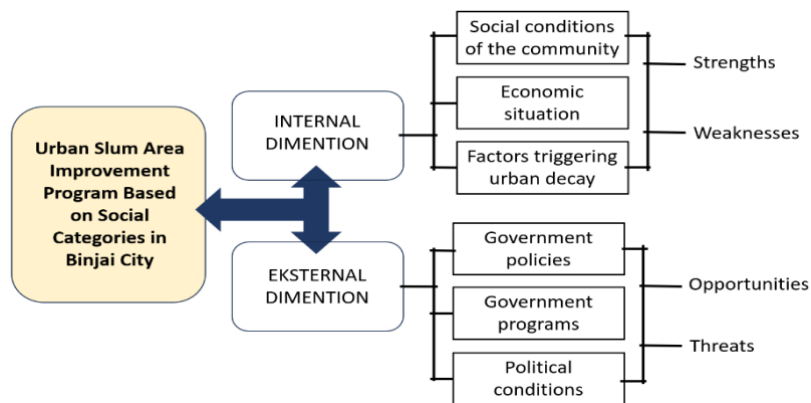


Figure 1. Two-Dimensional Social Categories in Slum Settlement Arrangement

Table 1. SWOT Analysis Matrix

INTERNAL DIMENTION (IFAS)	STRENGTHS 1. Alignment with the regional development mission for 2021-2024 2. Appropriate residential density according to standards 3. Availability of sanitation and clean water 4. High rates of land and property ownership 5. Productive age of household heads 6. Availability of waste management systems 7. Presence of Non-Governmental Organizations (NGOs)	WEAKNESSES: 1. Majority of graduates have elementary school education level 2. Labor and farming sectors dominate employment 3. Low income levels 4. Low legality of land ownership 5. Limited drainage network 6. Decline in building quality 7. Weakness in building permit issuance 8. Low level of human resources with awareness of clean and healthy living
EXTERNAL DIMENTION (EFAS)	Strategies (SO): 1. Implementation of the regional development mission. 2. Enhancement of community skills. 3. Conservation of sanitation and clean water. 4. Maintenance of building conditions. 5. Preservation and maintenance of waste disposal systems. 6. Development of Non-Governmental Organizations (NGOs).	Strategies (WO): 1. Empowerment of the community. 2. Expansion of job sectors in various fields. 3. Collaboration between the government and regional authorities for a database of land ownership legality. 4. Implementation and expansion of drainage network systems. 5. Enforcement of policy discipline regarding building permit issuance. 6. Provision of holistic assistance, both in the small business sector and agriculture.
Opportunities 1. Urban slum improvement program planning is available through the Public Works and People's Housing Program (PUPR) from the Ministry. 2. Contribution of regional authorities and the community in the implementation of the Urban Slum Improvement Program. 3. Low crime rates. 4. Availability of facilities and infrastructure (Public Facilities).	Threats: 1. Population growth. 2. Limited agricultural land. 3. High unemployment rates. 4. Low-quality public and social facilities. 5. Vulnerability to natural disasters.	Strategies (ST): 1. Government involvement in the implementation of slum area programs. 2. Involvement of environmental cleanliness and waste management agencies. 3. Enhancement of collaboration among the government, regional authorities, and the community. 4. Routine maintenance of public facilities.
	Strategies (WT): 1. Enhancement of community institutions in public facilities. 2. Involvement of the role of regional government in the implementation of slum area improvement programs with adequate budget allocations. 3. Collaboration between the government and the community in the arrangement of area layouts. 4. Reconstruction and equitable land distribution.	

Next is the SWOT Analysis Matrix. Taking into account the variables of the social conditions of the community, their economic situation, factors triggering slums, government policies and programs, and political conditions, the main strategies are formulated by integrating strengths, weaknesses, opportunities, and threats in the preceding table.

The results of the SWOT analysis indicate several crucial aspects. In terms of Strengths, they include the Regional Development Mission for 2021-2024 that aligns with the needs, Standard housing density for urban development, Provision of sanitation and clean water for public health, High land and building ownership rates reflecting property ownership stability, Productive age of household heads supporting economic activities, Waste disposal system to maintain environmental cleanliness, and Non-Governmental Organizations (NGOs) for social activities and community empowerment. On the other hand, Weaknesses include the majority having primary school education, indicating the need for improved educational access, Dominance of labor and farming jobs requiring job diversification, Low income as an economic challenge, Low legality of land ownership requiring efforts for legitimate ownership, Low drainage network leading to flood risks and needing improvement, Deterioration of building quality requiring maintenance and repair attention, Weaknesses in building permit issuance requiring process improvements, and Low human resources awareness of clean and healthy living, requiring increased community awareness.

Opportunities involve planning slum restructuring programs through the Ministry of Public Works and People's Housing (PUPR) program, Contributions from local authorities and communities in Slum Area Planning Programs to support environmental improvements, Low crime rates creating a safe environment for investment and community development, and Availability of facilities and infrastructure as a foundation for improving the quality of life. Threats faced include the increase in population, putting pressure on resources and infrastructure, Limited agricultural land requiring wise natural resource management, High unemployment rates requiring job creation efforts, Low public and social facilities demanding special attention for community well-being, and Vulnerability to natural disasters demanding disaster response planning and reliable infrastructure.

In response to these findings, a slum area planning program through social categories can be implemented with (SO) strategies, such as implementing regional development mission to maximize existing strengths, enhancing community skills through training and education, preserving clean water sanitation through public awareness campaigns, maintaining building conditions through repair and renovation programs, preserving and maintaining waste disposal systems through active community participation, and developing NGOs to strengthen social capacity. In terms of (WO) strategies, community empowerment through training and coaching programs, expanding job sectors in various fields to reduce dependence on specific sectors, government and local authority cooperation to enhance land ownership data and legality, implementing and expanding drainage network systems to address drainage issues, implementing policy discipline on building permit issuance to ensure compliance, and providing holistic assistance in both small business and agriculture sectors to support community economy. In (ST) strategies, involving the government in implementing slum area programs to maximize opportunities, involving environmental cleanliness and waste management agencies to maintain environmental cleanliness, improving cooperation between the government, local authorities, and the community to achieve common goals, and routine maintenance of public facilities to ensure optimal utilization. Finally, in (WT) strategies, involving the improvement of community institutions in public facilities to enhance involvement and responsibility, involving local government in implementing slum area

programs according to adequate budget allocation, and cooperation between the government and the community in spatial layout planning.

Conclusion

The results of the SWOT analysis identify crucial aspects, such as strengths in regional development mission, standard housing density, sanitation fulfillment, and non-governmental organizations. On the other hand, weaknesses include low education levels, job domination by laborers and farmers, and infrastructure in need of improvement. Opportunities lie in slum area planning programs through the Ministry of Public Works and People's Housing (PUPR), contributions from local authorities and communities, a safe environment, and the availability of facilities and infrastructure. Threats encompass population growth, limited agricultural land, high unemployment rates, low public facilities, and the risk of natural disasters. In response, SO strategies involve implementing the development mission, improving community skills, preserving sanitation, maintaining buildings, and developing non-governmental organizations. WO strategies focus on community empowerment, job diversification, cooperation for land ownership legality, drainage improvement, increased community awareness, and holistic assistance. ST strategies involve government participation in program implementation, environmental cleanliness, cooperation between government, local authorities, and the community, and maintenance of public facilities. Lastly, WT strategies include improving community institutions, involving local government according to budget allocation, and cooperation between the government and the community in spatial planning.

References

- Abdiyanto (2020) *Metode Penelitian Sosial & Sains*. Penerbit: Aneka Ilmu Semarang. ISBN: 9786239220945.
- Abdiyanto (2015). *Teori Pembangunan*. Penerbit : Fakultas Ekonomi dan Bisnis, Universitas Pembangunan Panca Budi, Medan. ISBN 978-602-71238-2-3.
- Azhar, A., & Dewata, I. (2018). 'Studi kapasitas beban pencemaran sungai berdasarkan parameter organik (BOD , COD dan TSS) di Batang Lembang Kota Solok, Provinsi Sumatera Barat', *Jurnal Pengelolaan Lingkungan Berkelanjutan*, 2(1), pp. 76–87.
- Barney, J. B., & Hesterly, W. S. (2015). *Strategic Management and Competitive Advantage*. Person/Prentice Hall.
- Barney, J. B., & William, S. H. (2008). *Strategic Management and Competitive Advantage*. 2nd Edition. USA: Pearson Printice Hall. BPS Indonesia. (2023). <https://sensus.bps.go.id/main/index/sp2020#:~:text=Jumlah%20penduduk%20Indonesia%20pada%20tahun,133.542.018%20untuk%20penduduk%20perempuan>.
- Budiyono, & Suryana, A. (2019). Analisis Penanganan Permukiman Kumuh (Studi Kasus Di Kelurahan Kampung Melayu Kecamatan Jatinegara Jakarta Timur). *Jurnal Ilmiah Plano Krisna*, 14(2), 54–63. .
- Cathrine, D. (2022). "Penataan Lingkungan Permukiman Kumuh di Wilayah Kecamatan Semampir Kota Surabaya Melalui Pendekatan Partisipasi Masyarakat". *Program Studi Perencanaan Wilayah dan Kota, Fakultas Teknik Sipil dan Perencanaan . Institut Teknologi*.
- Cresswell, W. J., Clark, & Plano., V. L. (2007). *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: Sage Publications, Inc.
- David, F. R. (2010). *Manajemen Strategi : Konsep*. Jakarta: Salemba Empat edisi 12.

- Defiana, I. (2016). Kampung Singgah Produktif : Pemicu Peningkatan Ekonomi Masyarakat Permukiman Kumuh. *Jurnal Sains Dan Seni ITS*, 5(2), 192–196.
- Deni Irawan, I. A., & Hidajat, J. T. (2018). Penanganan Permukiman Kumuh Perkotaan Menuju Program Pemerintah “Kotaku”(Kota Tanpa Kumuh) (Lokasi Studi : Kampung Lio, Kota Depok). (JOM) Bidang Perencanaan Wilayah & Kota, 1, 1–7. .
- Direktorat Jenderal Perumahan dan Permukiman. (2002). Rencana Strategi Peningkatan Kualitas Lingkungan Permukiman Kumuh 2002- 2010. . Departemen Permukiman dan Prasarana Wilayah.
- Direktorat Pengembangan Permukiman . (2014). direktorat Jendral Cipta Karya Kementerian Pekerjaan Umum.. Kebijakan dan Strategi Pengembangan Permukiman Tahun 2014.
- Emil, S. (2003). Pembangunan Berwawasan Lingkungan. PT. Mediatama Sarana: Jakarta. .
- Fauzi, H. I. (2023). Visi Pembangunan Kota Binjai 2021-2024. <https://sumut.antaranews.com/berita/384302/amir-hamzah-ingin-mewujudkan-binjai-maju-berbudaya-dan-religius>.
- Hamzah, A., & Sudra, I. W. (2000). “Dasar-dasar Hukum Perumahan”. Rineka Cipta: Jakarta.
- Hesse, S., & Biber. (2010). *Mixed Methodes Research: Merging Theory With Praticce*. New York: The Guildford Press.
- Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2001). *Strategic Manajement: Competitiveness and Globalization*, Edisi Bahasa Indonesia, Jakarta, Salemba Empat, 2001 .
- Joenso, R. C., & Sari, S. R. (2020). Klasifikasi Kekumuhan dan Konsep Penanganan Permukiman Kumuh Perkotaan (Studi Kasus : Permukiman Lampu Satu, Merauke). *Jurnal Arsitektur ARCADE*, 4(2), 94. <https://doi.org/10.31848/arcade.v4i2.366> .
- Juita, Y. S., & Adiwidjaja, I. (2018). Partisipasi Masyarakat Dalam Penataan Permukiman Kumuh. *JISIP : Jurnal Ilmu Sosial Dan Ilmu Politik*, 7(3), 94. www.publikasi.unitri.ac.id.
- Kotler, P. &. (2009). *Marketing Management: 13th Edition*. New Jersey: Upper Saddle River.
- Kotler, P., & Keller, K. (2006). *Marketing Management (12th ed.)*. New Jersey: Pearson Education, Inc.
- Nafsi, N. (2019). Karakteristik Permukiman Kumuh (Studi Kasus: Kecamatan Semarang Utara Kota Semarang. *Jurnal Malige Arsitektur*, 1(1), 30–39. .
- Octavionesti, A. A., & Mardiansjah, F. H. (2017). Penanganan Permukiman Kumuh Melalui Pembangunan Rusunawa: Studi Kasus Rusunawa Kaligawe, Kota Semarang. *Jurnal Riptek*, 2(1), 41–56.
- Saputro, E. Z. (2022). Normalisasi Kawasan Kumuh Eks Lokalisasi Putat Jaya, Kecamatan Sawahan, Kota Surabaya. *Jurnal Kajian Ruang*, 2(1), 19-28.
- Sari, A. R., & Ridlo, M. A. (2022). Studi Literature : Identifikasi Faktor Penyebab Terjadinya Permukiman Kumuh Di Kawasan Perkotaan. *Jurnal Kajian Ruang*, 1(2), 160. <https://doi.org/10.30659/jkr.v1i2.20022>.
- Srinivas, H. (2003). Slum, Squatter Areas and Informal Settlement, 9th International Conference On Sri Lanka Studies, Matara, Sri Lanka, Arawinda Nawagamuwa and Nils Viking.

- Supartini. (2003). *Pertumbuhan Permukiman Liar Tahun 1990 – 2000 di Kelurahan Sungai Harapan Kecamatan Sekupang Batam*, Skripsi Fakultas Geografi UGM, Yogyakarta.
- Surtiani, E. E. (2006). *Eny Endang Surtiani Magister Teknik Pembangunan Wilayah Dan Kota Program Pasca Sarjana-Universitas Diponegoro Semarang*.
- Sugiarto, A., dan Ramadania, R.K., 2023. Economic and Spatial Regional Integration and Its Impacts on Regional Development in North Tapanuli Regency. *Sinomic Journal : International Journal of Social Science, Education, Communication and Economics*. Vol.2, Issue 5 (2023). ww.sinomicsjournal.com. <https://doi.org/10.54443/sj.v2i5.233>. ISSN (e): 2829-7350 | ISSN(p): 2963-9441.
- Tarigan, R. (2005). *Perencanaan pembangunan wilayah*. PT. Bumi Aksara.
- Thamrin,. (2012). “Pesatnya Pertumbuhan Perumahan Dan Permukiman Menimbulkan Dampak Bagi Prasarana Dan Pengelompokan Hunian” *Bahan Kuliah Jurusan Planologi, Medan : Institut Teknologi Medan*. Untermand , Richard , and Small Robert, 1985, *Site Planning for Clauster Housing*, London: Perseus;.
- Wet, D., & Dhris. (2002). *The Experience with Dams and Resettlment in Africa*, World Commission on Dams, Cape Town, South Africa.
- Wijaya, D. W. (2016). 555-3808-1-Pb. *Perencanaan Penanganan Kawasan Permukiman Kumuh (Studi Penentuan Kawasan Prioritas Untuk Peningkatan Kualitas Infrastruktur Pada Kawasan Permukiman Kumuh Di Kota Malang)*, 2(1), 1–10.
- Yenny, N. (2009). Analisis Faktor-Faktor yang Mempengaruhi Kemiskinan di Kota Medan (Studi Kasus di Kawasan Kumuh). *JURNAL GEOGRAFI*, 1(1), 27-42.
- Yunus, H. (2005). *Struktur Tata Ruang Kota*, Pustaka Pelajar, Yogyakarta.