Exploring the Slum Formation in Medan: A Literature Review in Urban Planning and Society

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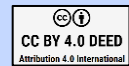* Correspondence author: suciastari1@gmail.com

ARTICLE INFO	ABSTRACT
	This article delves into the intricate issue of slum formation in Medan, Indonesia, exploring the challenges and opportunities in addressing this pressing urban problem. Drawing from a comprehensive literature review in urban planning and society, it elucidates the multifaceted factors contributing to the emergence of slums in Medan. These factors include high urbanization rates, limited access to basic amenities, low socioeconomic conditions, and inadequate spatial planning. Moreover, the article examines the adverse impacts of slum areas on both society and the environment, encompassing social, economic, and environmental ramifications. Despite facing complex challenges, there are opportunities to enhance the effectiveness of slum area mitigation programs in Medan. Collaborative efforts across sectors, utilization of technology, and community empowerment emerge as pivotal strategies in tackling this issue. Through strong partnerships among government agencies, NGOs, the private sector, and local communities, along with the application of innovative technological solutions in planning and implementation, a more holistic and integrated approach to slum area mitigation can be achieved. In emphasizing the importance of a comprehensive and sustainable approach to addressing slum areas, this article underscores the significance of collective action in designing solutions. By leveraging collaborative efforts and innovative approaches, it aims to foster the creation of inclusive, sustainable, and humane urban environments for all residents of Medan.

1. Introduction

The issue of slum settlements in major cities in Indonesia such as Medan has been the primary concern of the government every year. This is in line with the fundamental principle stipulated in Law Number 1 of 2011 concerning Housing and Settlement Areas, which underscores the right of every individual to live a prosperous life both physically and spiritually, including the right to adequate housing and a good and healthy environment. However, the problem of slum settlements in Medan continues to be an unresolved issue, as highlighted by several previous studies. (Akbar & Novira, 2019; Mahayati et al., 2024; Resa et al., 2017; Tasya Salsha Safarina & Verry Damayanti, 2023).

As the capital city of North Sumatra province, Medan has evolved into a significant regional economic hub on the island of Sumatra. Its status as the third largest city in Indonesia underscores the importance of organizing residential settlements. Unfortunately, Medan is also known to have serious issues in this regard, particularly concerning the existence of slum areas, as emphasized by Lubis (2019). One of the districts severely affected is the Medan Denai District, where two sub-districts, namely Tegal Sari Mandala II and Tegal Sari Mandala III sub-districts, have been identified as slum areas based on the decision of the Mayor of Medan Number 640/580.K/XI/2018.

Several studies have indicated several significant problems in these neighborhoods. Among them are poor environmental road conditions, ongoing waste management issues, and so forth. However, before delving deeper into understanding these issues, it is important to have a clear understanding of what is meant by "slum settlements."

According to the definition stipulated in Law Number 1 of 2011 concerning Housing and Settlement Areas, slum settlements are residential areas deemed unfit for habitation due to poor organization, high building density, and inadequate infrastructure. These characteristics often accompany life in slum areas, which are associated with low levels of education, low household incomes, and a prevalence of informal employment.

Literature reviews also distinguish between two types of slum environments: "slum" areas, which are legally inhabited but fail to meet the criteria for decent living, and "squatter" settlements, which are informal dwellings on land not owned by the occupants. Both types of environments present unique challenges in addressing the issue of slum settlements. (Borsuk, 2023; Gapur et al., 2018; Habib et al., 2024; Malik et al., 2020).

In the context of addressing slum settlement issues, identifying the conditions of slum areas is a crucial initial step. Based on the Regulation of the Minister of Public Works and People's Housing of the Republic of Indonesia Number 14 of 2018, criteria for slum conditions encompass both physical and land tenure aspects, which are considered in efforts to improve the quality of slum settlements. This assessment allows for the mapping of the degree of slum conditions, serving as the basis for designing appropriate intervention measures.

Furthermore, understanding the causes of slum formation is essential in devising effective intervention strategies. High urbanization rates, economic hardships, and a lack of law enforcement are identified as major factors triggering the growth of slum settlements, as outlined by Jamaluddin (2015) and Sembiring (2017).

In addressing this issue, various approaches have been proposed, including revitalization and resettlement, as stipulated in the Regulation of the Minister of Public Works and People's Housing of the Republic of Indonesia Number 14 of 2018. However, success in addressing slum settlements relies not solely on physical aspects. Social and cultural factors, as well as community participation, also play crucial roles in the success of these intervention strategies.

With the continuously increasing population growth and the increasingly apparent land constraints, tackling slum settlement issues in Medan poses a complex challenge. A holistic and sustainable approach is required, one that addresses not only its physical impacts but also involves active participation from various stakeholders, including affected communities.

Through a deep understanding of the causes and characteristics of slum settlements in Medan, it is hoped that this article can contribute to designing more effective and sustainable intervention strategies, thus creating a more inclusive, sustainable, and humane city for all its inhabitants.

2. Method

The research method employed in this article is a qualitative descriptive method (Angriani et al., 2021). This method was chosen to provide an in-depth understanding of the slum settlement issues in Medan, utilizing an approach that involves a detailed analysis of various relevant literature sources (Astija et al., 2021).

The first step in this research method is to conduct a thorough search and selection of literature relevant to the slum settlement issues in Medan. The literature selected is sourced from various outlets, including scholarly journals, books, government reports, and related official documents.

Following the selection of literature, an in-depth analysis of the content is conducted. This analysis involves identifying common patterns, key findings, and arguments emerging from the selected literature. The data obtained from the literature analysis is then systematically organized and presented in the article.

Subsequently, the obtained data will be carefully interpreted to understand various aspects related to the slum settlement issues in Medan. This interpretation will aid in identifying the causes, impacts, and proposed solutions to address these issues.

Throughout the writing process, efforts will be made to ensure objectivity and accuracy in presenting the data and analysis, while also considering various perspectives found in the identified literature.

Overall, this qualitative descriptive research method can provide a comprehensive understanding of the slum settlement issues in Medan, as well as contribute to designing more effective and sustainable intervention strategies.

3. Discussion

3.1. Definition and Characteristics of Slum Areas

Slum settlements are inhabitable areas characterized by irregular building structures, high population density, and substandard building quality and infrastructure (Ghosh, 2008; Sari & Ridlo, 2022). Law Number 1 of 2011 concerning Housing and Settlement Areas defines slum settlements as locations marked by irregular buildings, chaotic settlement patterns, and inadequate public facilities (Satrio & Sukmawati, 2021). This definition is also reinforced by Drakakis-Smith (1979) and Grimes (1976), as well as Suharini (2007), who emphasize low quality, lack of facilities, and environmental disorganization.

Several factors contribute to the emergence of slum settlements (Inriani et al., 2023). High urban growth not matched by sufficient income, government delays in infrastructure development, and lack of site planning are among them. Additionally, economic, geographical, and psychological factors also influence the presence of slum settlements (Fitri & Sulistinah, 2021). The characteristics of slum settlements include irregular building structures, high population density, and low building quality. Houses tend to be impermanent, with high and irregular density. Limited road infrastructure,

poor drainage, and lack of public facilities are also characteristic features of slum settlements.

The Medan Government has undertaken various efforts to address and redevelop slum settlement areas. Housing renovation programs, provision of housing for low-income communities, and infrastructure development are among the steps taken. However, there are still several obstacles and challenges that need to be overcome to reduce the extent of slum areas in Medan (*Legislator Dorong Pemkot Kurangi Pemukiman Kumuh Di Medan*, n.d.; *Luas Permukiman Kumuh Di Medan Tersisa 306 Hektare*, 2022). Housing development and redevelopment plans are crucial strategies in addressing slum settlement issues. The Development Plan for Housing and Settlement Areas (*RP3KP*) document serves as an operational reference for stakeholders in the field of housing and settlement development. In the context of Medan, thorough planning based on spatial plans and land feasibility is key to addressing slum settlement issues. Despite various mitigation efforts, there are still several challenges to be faced in addressing slum settlement issues. Improving housing affordability, producing quality building materials, and mastering cost-effective construction technologies are further steps that need to be considered by the Medan government.

Thus, a comprehensive understanding of the definition, causative factors, characteristics, and mitigation, as well as housing development and redevelopment plans is key to addressing slum settlement issues in Medan and other regions.

3.2. Literature Review on the Causes of Slum Formation in Medan

The formation of slum areas in Medan is a complex phenomenon influenced by various social, economic, and political factors. Several studies have been conducted to understand the causes and factors influencing the formation of slum areas. This literature review aims to summarize the existing understanding from previous research on this issue.

Factors Contributing to the Formation of Slum Areas in Medan (Fitri & Sulistinah, 2021; Sari & Ridlo, 2022) include:

1. Urbanization and Population Migration

Urbanization is the process of rural areas modernizing into cities, triggering population movements from rural to urban areas or other peri-urban regions. In Medan, high urbanization rates have led to population migration from rural to urban areas, ultimately resulting in the formation of new slum areas (Hari Mardiansjah & Rahayu, 2019; Prasodjo, 2018).

2. Land Conditions in Urban Areas

Rapid urban growth in Medan has created an imbalance in housing supply for both affluent and low-income groups. Consequently, low-income individuals are forced to reside in substandard housing units in slum areas.

3. Limited Infrastructure and Basic Facilities

Slum areas are characterized by inadequate basic facilities and infrastructure such as clean water supply, roads, drainage, electricity, schools, and healthcare centers. The government's limited capacity to provide these facilities exacerbates the conditions in slum areas.

4. Socioeconomic Issues

The majority of slum dwellers in Medan have low incomes due to limited access to formal employment opportunities (Lestari, 2023). This compels them to seek work in the informal sector, further deteriorating economic conditions and contributing to the formation of slum areas.

5. Socio-Cultural Factors

Slum areas are often characterized by low levels of education and skills among residents. This lack of education and skills limits their access to human resource development opportunities (*Ini Masalah Pendidikan Di Kota Medan Yang Tercatat Dalam LKPJ*, 2015). Additionally, the complex social structure and cultural diversity make it challenging to establish community-based institutions or improve collective welfare.

6. Inappropriate Spatial Planning

Urban spatial planning that disregards environmental carrying capacity can lead to the formation of slum areas. Misguided investments in urban space utilization can degrade the environment and drive slum area growth.

7. Limited Accessibility

The restricted access of poor populations to community capital such as public facilities, natural resources, and social capital also contributes to the formation of slum areas in Medan.

8. Education

Education is a determinant factor in achieving employment and income. Limited access to quality education can restrict economic opportunities for communities and lead to the formation of slum areas.

Several previous studies have been conducted to understand the phenomenon of slum areas in Medan (Putra & Andriana, 2017). These studies identify dominant factors influencing the formation of slum areas, including physical, economic, social, and cultural conditions. Research in the Bagan Deli Belawan Subdistrict, for instance, found that environmental pollution due to waste and sewage was a primary cause of slum area formation. Residents in this area also experienced economic difficulties and had limited access to adequate environmental infrastructure. These studies provide in-depth insights into the issues of slum areas in Medan and the factors influencing them. Further research efforts and interventions are needed to address these issues and improve the quality of life for communities in these areas.

3.3. The Role of Urban Planning in Preventing and Addressing the Formation of Slum Areas

The urban planning approach to addressing the issue of slum areas in Medan requires a holistic strategy that integrates physical, social, economic, and environmental aspects. Spatial planning and regional development are key to creating sustainable and habitable areas. An essential aspect of this approach is the active participation of the community in the planning and implementation processes.

Policies and programs implemented to prevent and address the formation of slum areas in Medan involve various stakeholders, including the central government, local government, non-governmental organizations, and the private sector. One of the main programs is the Community-Based Settlement Environment Arrangement (PLPBK), which emphasizes community participation in addressing environmental and housing issues.

Additionally, there are infrastructure improvement programs covering the provision of clean water, environmental sanitation, local roads, and area revitalization. These programs aim to improve the quality of life for communities in vulnerable areas prone to slum formation.

Furthermore, efforts to improve housing quality through the development of sustainable and habitable housing are underway. This is done through collaboration between the government and the private sector to ensure that infrastructure development meets the needs and capacities of local communities.

In addition to physical development programs, the planning approach also includes efforts to enhance community capacity in managing the environment and local resources. Training and education programs on the importance of clean and healthy environments and the sustainable use of natural resources are integral parts of this strategy.

Overall, a holistic planning approach involving various stakeholders is key to addressing the issue of slum areas in Medan. With good coordination between the government, communities, and the private sector, it is hoped that better, sustainable, and habitable residential areas will be realized for all residents of Medan.

In preventing and addressing the formation of slum areas in Medan, several policies can be implemented. First, the government can increase investment in basic infrastructure such as roads, drainage systems, sanitation, and clean water supply. This step is expected to reduce the risk of slum area formation and improve the quality of the residential environment. Additionally, rehabilitation and renovation programs for slum areas are also needed to improve the physical conditions of existing settlements, including housing repairs and the construction of public facilities. Furthermore, through community empowerment, residents can be involved in the planning, development, and maintenance of residential environments. This includes skills training, sanitation education, and the formation of community groups actively involved in improving their environment. Strict enforcement of spatial planning and building regulations is also crucial to ensure that development is carried out following established standards to maintain environmental quality. Finally, support for affordable housing development for low-income communities needs to be strengthened through various appropriate policies and programs. With the integrated and sustainable implementation of these policies, it is hoped that the formation of slum areas in Medan can be reduced and prevented, thereby improving the overall quality of life for the community.

3.4. The Impact of Slum Areas on Society and the Environment

Slum areas in Medan have significant social and economic impacts on their residents and the surrounding environment. Socially, the presence of slum areas often serves as housing for economically disadvantaged and vulnerable communities. This can create environments susceptible to social issues such as unemployment, crime, and higher levels of poverty compared to more developed areas. Additionally, slum areas

often have limited or no access to adequate education and healthcare facilities, leading to a lower quality of life for their inhabitants.

The economic impact of slum areas cannot be overlooked either. The majority of slum area residents typically work in the informal sector with low and unstable incomes. This condition can result in the inability to access formal employment opportunities that provide social security and better economic welfare. Moreover, poor infrastructure and limited access to basic services such as clean water and sanitation can hinder the economic potential of slum area residents, as they must spend more time and money to meet their basic needs.

The environmental impact of slum areas in Medan is also significant. High population density, lack of effective waste management systems, and inadequate access to sanitation services can lead to serious environmental pollution. Poorly managed domestic waste can contaminate groundwater and rivers, threatening public health and environmental sustainability. Furthermore, the development of slum areas often occurs without proper spatial planning and planning, resulting in environmental damage such as deforestation and the loss of natural habitats for local flora and fauna.

Overall, the presence of slum areas in Medan has complex and detrimental impacts, both socially, economically, and environmentally. Therefore, efforts to address this issue require a holistic and integrated approach, including government interventions, community empowerment, and sustainable infrastructure development.

3.5. Challenges and Opportunities in Addressing Slum Areas in Medan

The main challenges in addressing slum areas in Medan encompass various complex and interconnected factors. Firstly, the lack of resources and budget constraints pose significant barriers to implementing slum area mitigation programs. Like many other large cities, Medan faces significant financial pressures to meet various infrastructure and social needs. This often results in limited funding allocations for slum area management, restricting the ability to implement comprehensive and sustainable solutions.

Moreover, legal issues and land ownership often hinder slum area development and rehabilitation efforts (Nasution, 2019). Many slum areas in Medan are built on informally owned or unauthorized land, making relocation or redevelopment processes difficult. This creates legal uncertainties for both residents and the government, hindering efforts to improve the environment and infrastructure.

The inability to address social and economic inequalities is also a serious challenge in slum area management (Suwarja, 2019). Factors such as unemployment, unequal access to education and healthcare services, and lack of economic opportunities for slum area residents all contribute to a difficult-to-break cycle of poverty.

Despite these complex challenges, there are several opportunities to enhance the effectiveness of slum area mitigation programs in Medan. Firstly, collaboration among the government, NGOs, and the private sector can strengthen collective efforts to address slum area issues. Such collaboration can optimize resource utilization and enable the adoption of more holistic and integrated approaches.

Additionally, the use of technology and innovation in planning and implementing slum area mitigation programs can improve efficiency and effectiveness. Utilizing spatial data, Big Data analysis and other technologies can help the government identify slum areas, map population needs, and plan targeted solutions.

Community empowerment is also key to enhancing the effectiveness of slum area mitigation programs. By involving slum area residents in the planning, implementation, and monitoring of programs, a greater sense of ownership and responsibility can be fostered, thereby enhancing the sustainability of slum area management efforts.

Addressing the obstacles encountered in managing slum areas in Medan necessitates a holistic and enduring strategy, involving cooperation across different sectors, utilization of technology, and empowerment of the community. By capitalizing on these prospects, there is an optimistic outlook for enhancing the efficiency of slum area management endeavors, thereby positively impacting the residents' welfare and promoting environmental sustainability in Medan.

4. Conclusion

In this article, an in-depth discussion has been conducted regarding the issue of slum formation in Medan, as well as the challenges and opportunities in its mitigation efforts. Various factors contributing to the formation of slum areas have been identified, including high urbanization rates, limited access to basic facilities, low socio-economic conditions, and inadequate spatial planning. Furthermore, the impacts of slum areas on society and the environment have been thoroughly examined, encompassing detrimental social, economic, and environmental effects.

Despite facing complex challenges, there are opportunities to enhance the effectiveness of slum area mitigation programs in Medan. Cross-sector collaboration, technological applications, and community empowerment are key in addressing this issue. By leveraging strong collaboration among the government, NGOs, private sector, and community, as well as harnessing technological innovations in program planning and implementation, it is hoped that more holistic and integrated solutions can be developed in addressing slum areas in Medan.

In this context, this article underscores the importance of a comprehensive and sustainable approach in designing slum area mitigation strategies. Through joint efforts from various stakeholders and the implementation of innovative solutions, it is anticipated that a more inclusive, sustainable, and humane city can be created for all its inhabitants.

References

Akbar, M. R., & Novira, N. (2019). Analisis Penanganan Permukiman Kumuh di Kecamatan Medan Denai. *Tunas Geografi*, *8*(1), 59. https://doi.org/10.24114/tgeo.v8i1.15453

Angriani, F., Siradjuddin, I., & Idham AP, A. (2021). Studi Kawasan Permukiman Kumuh Pedesaan (Dutaku) Berbasis GIS di Desa Polewali dan Desa Taccorong Kecamatan Gantarang Kabupaten Bulukumba. *Jurnal Teknik ITS*, *10*(2). https://doi.org/10.12962/j23373539.v10i2.62489

Astija, S., Kadir, I., & Yusuf, D. N. (2021). Analisis Prioritas Konsep Dan Strategi Penanganan Kawasan Permukiman Kumuh Di Kecamatan Nambo. *Jurnal Perencanaan Wilayah*, *6*(1), 59. https://doi.org/10.33772/jpw.v6i1.17335

Borsuk, I. (2023). Gendered dispossession and women's changing poverty by slum/squatter redevelopment projects: A case study from Turkey. *Environment and Planning A: Economy and Space*, *55*(5), 1190–1206.

https://doi.org/10.1177/0308518X211016864

Fitri, D. A., & Sulistinah. (2021). Faktor-Faktor Penyebab Munculnya Permukiman Kumuh Daerah Perkotaan di Indonesia (Sebuah studi literatur). *Jurnal Swara Bhumi*, *1*(1). https://ejournal.unesa.ac.id/index.php/swara-bhumi/article/view/38202

Gapur, A., Baiquni, R., & Pujiono, M. (2018). Tunda-Tunda Bamban Dalam Kebudayaan Masyarakat Melayu Tamiang di Aceh (Analisis Wacana Teks, Koteks, dan Konteks). *ETNOSIA : Jurnal Etnografi Indonesia*, *3*(2), 141. https://doi.org/10.31947/etnosia.v3i2.3617

Habib, S. S., Zaidi, S., Riaz, A., Tahir, H. N., Mazhar, L. A., & Memon, Z. (2024). Social determinants of low uptake of childhood vaccination in high-risk squatter settlements in Karachi, Pakistan – A step towards addressing vaccine inequity in urban slums. *Vaccine: X*, *17*, 100427. https://doi.org/10.1016/j.jvacx.2023.100427

Hari Mardiansjah, F., & Rahayu, P. (2019). URBANISASI DAN PERTUMBUHAN KOTA-KOTA DI INDONESIA: SUATU PERBANDINGAN ANTAR-WILAYAH MAKRO INDONESIA. *Jurnal Pengembangan Kota*, *7*(1), 91–110. https://doi.org/10.14710/jpk.7.1.91-108

Ini Masalah Pendidikan di Kota Medan yang Tercatat dalam LKPJ. (2015). Tribunnews Medan. https://medan.tribunnews.com/2015/04/27/ini-masalah-pendidikan-di-kota-medan-yang-tercatat-dalam-lkpj

Jamaluddin, A. N. (2015). *Sosiologi Perkotaan Memahami Masyarakat Kota dan Problematikanya*. Pustaka Setia.

Legislator Dorong Pemkot Kurangi Pemukiman Kumuh di Medan. (n.d.). Antara News Sumatera Utara. Retrieved February 16, 2024, from https://sumut.antaranews.com/berita/546219/legislator-dorong-pemkot-kurangi-pemukiman-kumuh-di-medan?page=all

Lestari, K. (2023). *Benahi Kawasan Kumuh di Medan, SMF Salurkan Rp 1,5 Miliar*. https://lestari.kompas.com/read/2023/03/10/160000586/benahi-kawasan-kumuh-di-medan-smf-salurkan-rp-15-miliar

Luas Permukiman Kumuh di Medan Tersisa 306 Hektare. (2022). Lintas Medan. https://lintasmedan.com/luas-permukiman-kumuh-di-medan-tersisa-306-hektare/

Mahayati, P., Astuti, W., & Yudana, G. (2024). Faktor prioritas kesiapan penanganan kawasan permukiman kumuh (studi kasus: bantaran Sungai Kali Anyar, Kota Surakarta). *Region : Jurnal Pembangunan Wilayah Dan Perencanaan Partisipatif*, *19*(1), 127. https://doi.org/10.20961/region.v19i1.64560

Malik, S., Roosli, R., & Tariq, F. (2020). Investigation of informal housing challenges and issues: experiences from slum and squatter of Lahore. *Journal of Housing and the Built Environment*, *35*(1), 143–170. https://doi.org/10.1007/s10901-019-09669-9

Nasution, A. muflih. (2019). Analisis Permasalahan Perumahan dan Permukiman di Kota Medan. *JAUR (JOURNAL OF ARCHITECTURE AND URBANISM RESEARCH)*, *3*(2). https://ojs.uma.ac.id/index.php/jaur/article/view/2908

Prasodjo, I. (2018). DAMPAK URBANISASI BAGI PEMBANGUNAN MANUSIA 2010-2016 Studi Kasus: Jakarta, Surabaya dan Medan. *Jurnal Ekonomi*, *23*(3), 305. https://doi.org/10.24912/je.v23i3.415

Putra, K. E., & Andriana, M. (2017). FAKTOR PENYEBAB PERMUKIMAN KUMUH DI KELURAHAN BAGAN DELI BELAWAN KOTA MEDAN. *Jurnal Koridor*, *8*(2), 97–104. https://doi.org/10.32734/koridor.v8i2.1334

Resa, A. M., Saam, Z., & Tarumun, S. (2017). Strategi Penataan Kawasan Permukiman

Kumuh Perkotaan Kampung Bandar Kota Pekanbaru. *Dinamika Lingkungan Indonesia*, *4*(2), 117. https://doi.org/10.31258/dli.4.2.p.117-127

Sari, A. R. S., & 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

Sembiring, M. A. (2017). *Karakteristik Permukiman Kumuh di Kecamatan Medan Denai*. Universitas Negeri Medan.

Suwarja, H. M. (2019). Implementasi Undang-Undang Pemerintah Republik Indonesia Nomor 1 Tahun 2011 Tentang Perumahan dan Kawasan Permukiman dalam Rangka Peningkatan Kualitas Infrastruktur Kawasan Permukiman Kumuh Kota Medan di Kecamatan Medan Marelan. *PUBLIK REFORM : JURNAL ADMINISTRASI PUBLIK*, *5*(1). https://jurnal.dharmawangsa.ac.id/index.php/jupublik/article/view/501/0

Tasya Salsha Safarina, & Verry Damayanti. (2023). Strategi Penanganan Kawasan Permukiman Kumuh di Kelurahan Cibangkong Berdasarkan Konsep Livable Settlement. *Jurnal Riset Perencanaan Wilayah Dan Kota*, 55–64. https://doi.org/10.29313/jrpwk.v3i1.1956