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Supervision and Control of The Detailed Spatial Plan Policy: Detailed Spatial Plan of Serang Subdistrict and Cipocok Jaya Subdistrict

Ardian Havidani, Ipah Ema Jumiati, Suwaib Amiruddin
Universitas Sultan Ageng Tirtayasa, Serang Banten, Indonesia
Corresponding author email: 7775210016@untirta.ac.id

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Abstract – This study aims to determine the extent of control and supervision of the Detailed Spatial Plan of Serang Subdistrict and Cipocok Jaya Subdistrict, Serang City, Banten Province. Supervision and control of spatial utilization are essential to ensure that space or land is utilized by the designation and plan that has been determined. The main objective is maintaining sustainable spatial planning, protecting the environment, and avoiding adverse impacts from inappropriate land use. This research used the descriptive qualitative method. The findings show that spatial planning supervision and control are carried out by evaluating the realization of the Detailed Spatial Plan, providing space for the community to report spatial irregularities, and considering spatial planning violation issues with the spatial planning forum. However, supervision and control in implementing the policies of the Spatial Detail Plan of the Serang Subdistrict and Cipocok Jaya Subdistrict still need to be stronger. This can be seen by the large number of buildings that stand on river borders, railroad borders, borders Extra High Voltage Airways, as well as the conversion of functions in the wetland agricultural zone in the Cipocok Jaya Subdistrict. For this reason, the government needs to optimize the role of the Spatial Planning Forum by involving the community, academics, urban observers, and the community in monitoring and controlling the implementation of the Detailed Spatial Plan of Serang Subdistrict and Cipocok Jaya Subdistrict.
***Keywords**: Detailed Spatial Plan, Supervision, Control, Space Utilization*

1. INTRODUCTION

The rapid development of cities has implications for the limited space in urban areas. With the limited availability of each space, space utilization needs to be done optimally without ignoring the environmental impact and sustainability of the environment. When economic-oriented development occurs, spatial planning management guidelines that serve as development guidelines are often overlooked and enforced. Investment in efforts to increase economic growth and regional income is frequently used as the basis for changes or revisions to spatial planning, which is then used as justification for investment activities. (Budiman et al., 2020) [2].

Therefore, the government's role as a law enforcement agency becomes increasingly essential, ignoring the broader legal framework, which is not just a matter of formal legality. Control of space utilization can be through zoning regulations, licensing, incentives, and disincentives. Spatial planning is a strategic effort made to regulate the use of space to achieve development goals that are sustainable, structured, and responsive to the needs of society and the environment. The Detailed Spatial Plan (RDTR) is an essential component in spatial planning that regulates land use in more detail per specific zoning, designations, and functions in an area.

The existence of RDTR is expected to ensure that every development activity and space utilization goes according to plan and avoid problems such as incompatibility of land functions, environmental degradation, and conflicts of interest in land use. Detailed spatial plans (RDTR) are critical instruments for translating broader spatial policies into actionable guidelines at the local level. However, the absence of adequate supervision and control in implementing these plans often results in deviations that compromise sustainable and orderly development goals. Issues such as illegal land-use changes, environmental degradation, and haphazard urban growth underline the necessity of effective oversight. Supervision ensures that development activities align with the provisions of the detailed spatial plan, while control mechanisms help prevent unauthorized or detrimental practices.

This is particularly important in urban areas, where land use must be meticulously managed to balance economic, social, and environmental needs. By reinforcing supervision and control, authorities can uphold the integrity of spatial plans, ensuring that land use remains efficient, equitable, and sustainable. Moreover, this oversight promotes legal compliance, protects public

interests, and strengthens resilience against future challenges, making it a cornerstone of effective spatial governance.

Local regulations of Serang City already prepared a Detailed Regional Spatial Plan for Serang Subdistrict and Cipocok Jaya Subdistrict, along with zoning regulations based on the Regional Regulation of Serang City Number 9 Year 2014 concerning the Detailed Regional Spatial Plan and Zoning Regulations for Subdistrict Serang and Cipocok Jaya from 2013 to 2033 (Jumiati et al., 2024) [2]. However, in its implementation, the supervision and control of the RDTR of the Serang Subdistrict and the Cipocok Jaya Subdistrict of Serang City face various challenges.

Some problems often include a weak monitoring system, a lack of coordination between related agencies, and low compliance of development actors with zoning and spatial regulations. In addition, weak enforcement and community involvement in spatial planning supervision often led to deviations in spatial utilization that harmed environmental quality and community welfare. The spatial planning violations in Serang City, especially in the Serang Sub-District and Cipocok Jaya Sub-District, require spatial utilization control space utilization. Spatial utilization control functions as a controller of public interests and protects the realization of social justice. Without efforts to control spatial utilization, any indication of non-conformity and violation of spatial utilization will cause difficulties in achieving general and social justice.

Supervision and control of RDTR are essential steps to ensure that the established plan is carried out according to total utilization. Adequate supervision allows for continuous monitoring, corrective action against violations, and strict law enforcement to act against violations that occur. Through RDTR control, the government can be more responsive in managing space and keeping its utilization aligned with sustainability principles and environmental balance.

Therefore, this research focuses on RDTR supervision and control to evaluate the effectiveness of existing spatial supervision and identify factors that influence compliance with RDTR. By understanding the challenges and opportunities in the supervision and control of RDTR, an optimal solution can be found in implementing RDTR to impact sustainable development and a well-organized environment positively

2. LITERATURE REVIEW

a. Elderly Population in Indonesia

As people grow older, their physiological and cognitive abilities naturally decline, making them more susceptible to health problems and increasing their reliance on others. This dependence varies in severity, ranging from mild frailty to a complete inability to carry out daily tasks without help. According to the WHO (2012), the health challenges faced by elderly individuals in low- and middle-income countries stem from various illnesses, such as heart disease, stroke, vision impairment, and hearing loss.

The increasing number of older adults also underscores the need for a stronger social protection system. Many seniors lack pension benefits or sufficient financial assistance, compelling them to continue working despite physical limitations. This emphasizes the importance of government policies aimed at improving the well-being of the elderly population.

While advancements in development have led to an increase in average life expectancy, Indonesia's healthy life expectancy remains relatively low. A thriving population should not only achieve longevity but also maintain good health to support the advancement of social services. *(Elderly Population Statistics 2023).*

On a global scale, life expectancy represents the estimated number of years a person is likely to live based on current mortality rates. The latest 2023 report from the United Nations (UN) indicates that the global life expectancy is 70.8 years for males and 76.0 years for females, with an overall average of 73.4 years. *(United Nations via World Population).*

Elderly individuals who are neglected are those aged 60 and above who reside in disadvantaged conditions and do not receive proper care or attention from their families and communities. They often life in isolation, face physical disabilities, endure discrimination and exploitation, and have difficulty accessing essential social services.

Neglected elderly individuals can be categorized into two groups. The first group consists of economically neglected seniors, who lack the financial means to fulfill basic necessities like food and medical care. This condition may result from poverty or the inability to work. The second group

includes socially neglected seniors, who suffer from loneliness, social isolation, and the absence of close family or friends. Seniors in this situation often feel abandoned and unsupported, which negatively impacts their overall well-being.

b. Disaster Management for the Elderly Population

Disaster management for elderly individuals requires a more sensitive and specialized approach, considering their physical, psychological, and social vulnerabilities. Older adults have unique needs compared to other age groups, such as limited mobility, chronic illnesses, and difficulties accessing information and services. Therefore, it is essential to ensure that disaster management mechanisms effectively reach and protect this group.

Disaster Management Mechanisms for the Elderly include this several process:

a. *Planning and Preparedness.* At the planning and preparedness stage, it is crucial to include older adults in emergency response strategies by Mapping Vulnerable Elderly Populations with (a) Identifying At-Risk Seniors: Conducting assessments to identify elderly individuals requiring special attention, including those in nursing homes, those with medical conditions, and those living alone and (b) Collaboration with Social Institutions and Families: Partnering with nursing homes, community organizations, and families to ensure elderly individuals receive proper care and attention.

b. *Developing an Inclusive Emergency Plan*, by (a) Emergency plans should address the specific needs of the elderly, such as accessible shelters, assistive devices (medical supplies, wheelchairs, medications), and psychosocial support; ((b) Evacuation strategies should consider mobility limitations and prioritize assisting elderly individuals in emergencies and (c) Disaster simulation exercises involving the elderly will enhance their preparedness and that of their families.

c. *Education and Awareness* by (a) Disaster Education: Providing elderly individuals with easy-to-understand disaster preparedness information through appropriate media, such as readable brochures, face-to-face training, or audiovisual materials and (b) Technology Utilization: Implementing user-friendly early warning applications or alternative communication channels to keep older adults informed during disasters.

3. METHOD

This research uses qualitative research methods to explore a deep understanding of the phenomenon studied. This approach was chosen because it is suitable for exploring participants' meanings, perspectives, and experiences directly related to the research focus. Data collection techniques in this study used interviews and documentation. This research can provide strategic insights to improve the governance of spatial supervision at the local and national levels.

4. RESULT AND DISCUSSION

4.1. The detailed spatial plan for the serang sub-district and Cipocok Jaya sub-district

The Detailed Spatial Plan (RDTR) of Serang Subdistrict and Cipocok Jaya states that the service structure of Serang City activities is planned as a City Service Center, covering the central area of Serang City, namely Serang Subdistrict and Cipocok Jaya with a center in Serang Village with primary functions of government, education, trade, services, and secondary functions of housing, dry land agriculture, and artificial tourism. The hierarchy of service centers in Serang City is intended to create spatial order. Each city center service is the location of the concentration of service facilities that act as a binding factor for each city sub-center. These sub-centers are expected to meet the demanding needs of the population - in carrying out socio-economic activities.

The placement of locations and a transparent service area will lead to the efficiency and effectiveness of service patterns that ultimately lead to the efficiency of space utilization. The Detailed Spatial Plan of the Serang Sub-district and Cipocok Jaya Sub-district consists of a Spatial Pattern Plan and an Infrastructure Network Plan. The spatial pattern plan of Serang Sub-district and Cipocok Jaya Sub-district, with an area of approximately 6,151 (six thousand one hundred fifty-one) hectares, consists of a. protection zone plan covering an area of roughly 266 (two hundred sixty-six) hectares or 4.33 % (four point thirty-three) percent; and b. cultivation zone plan covering an area of approximately 5,885 (five thousand eight hundred eighty-five) hectares or 95.67 % (ninety-five point sixty-seven) percent. The following tables and figures can present the spatial pattern plan data.

Table 1 Types of Space Utilization Patterns in Serang and Cipocok Jaya Sub-Districts Year 2013-2033

No.	Type of Space Utilization Pattern	Area (Ha)
A.	Protected Zone	
1	River Frontage Zone	74
2	Green Line Zone	36
3	Neighborhood Park Zone	4
4	City Park Zone	12
5	Cemetery Zone	47
6	*Very High Voltage Power Lines Boundary Zone*	172
7	Gas Pipeline Boundary Zone	16
8	Cultural Heritage Zone	3
9	River	24
	A Total	388
B.	Cultivation Zone	
1	High density residential zone	1.372
2	Medium density residential zone	1.956
3	Low-density Residential Zone	1.716
4	Trade and service zone	310
5	Warehousing Zone	35
6	Government office zone	43
7	Education facility zone	36
8	Health facility zone	8
9	Zone of worship facilities	11
10	Sport facility zone	7
11	Transportation zone	8
12	Defense and security zone	12
13	Non-green open space zone	3
14	Agriculture zone	54
15	Road	192
	B Total	5.763
	A+B Total	6.151

(Source: Local Regulation of Serang City Number 9 of 2014 concerning Detailed Spatial Plan and Zoning Regulation of Serang and Cipocok Jaya Sub-districts 2013-2033)

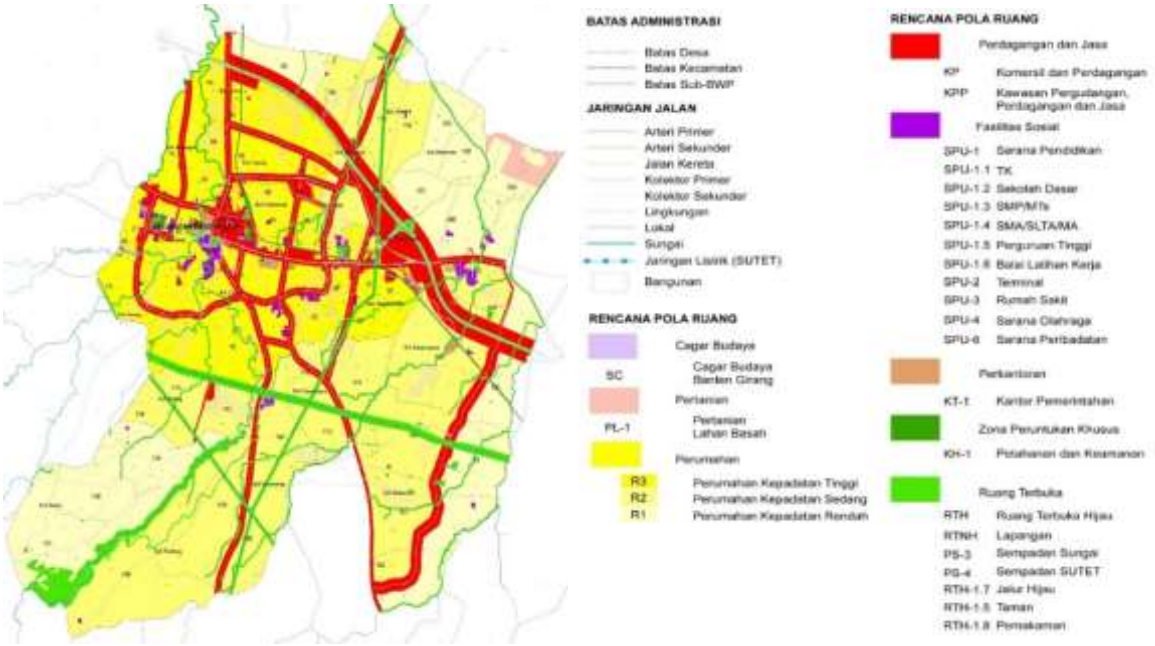

Figure 1. Spatial Pattern Plan Map

It can be seen in the figure above that the spatial pattern plan map of the Serang sub-district and Cipocok Jaya sub-district is dominated by residential land uses consisting of high-density housing, medium-density housing, and low-density housing. Trade and service land uses also dominate the spatial pattern plan of Serang Sub-district and Cipocok Jaya Sub-district, which linearly follows the road network of Serang Sub-district and Cipocok Jaya Sub-district.

The functions of the Detailed Spatial Plan and Zoning Regulation of Serang Sub-district and Cipocok Jaya Sub-district of Serang City are as follows:

1. Controlling the quality of urban space utilization based on the Regional Spatial Plan
2. reference for space utilization activities that are more detailed than the space utilization activities regulated in the Regional Spatial Plan
3. reference for space utilization control activities
4. reference in the preparation of Building and Environmental Planning

4.2. The Spatial plan supervision

Spatial plan supervision is an exercise in understanding the arrangements of the enactment so that Spatial planning can be realized (Government Regulation Number 21 of 2021 on implementing Spatial Planning). The first step in controlling and supervising is through licensing mechanisms, one of which is the Conformity of Space Utilisation Activities (KKPR), previously known as location permits. KKPR is vital for ensuring that every planned activity or development is by the Regional Spatial Plan and Spatial Detail Plan, thus maintaining order in space utilization. Conformity of Space Utilization Activities (KKPR) (previously called site permit) is one of the basic requirements that all economic actors must meet to obtain a business permit.

However, Small and Medium Enterprises (SMEs) only need to submit an independent statement already available in the OSS based on risk and be prepared to accept sanctions if non-compliance in the future; the benefits will be determined based on applicable regulations. If you are a business actor with a location permit valid before the Job Creation Law, you can continue using that permit. KKPR is a Single Reference for Space Utilization, Land Acquisition, Land Rights Transfer, and Land Rights Issuance. The conformity of space utilization activities will be revoked together with the issued business license if: 1) The applicant provides false information and provides false information; 2) The applicant still needs to fulfill the provisions stipulated regarding the suitability of this land use activity; 3) Problems or disputes exist regarding the status of proof of ownership of land rights based on court decisions that have permanent legal force; 4) Activities that have the impact of causing

social unrest, disturbance of public order, environmental damage, and disruption of the function of essential state assets.

Problems related to KKPR in Serang City, especially regarding automatic issuance from the central government and the need to integrate the Serang-Cipocok RDTR with the OSS (Online Single Submission) system, indicate technical and coordination obstacles in licensing governance. It is difficult for the Serang City government to exercise spatial control because decisions made by the central government may not align with the actual spatial plan (RTRW) or detailed spatial plan. RDTR (Spatial Detail Plan), which needs to be integrated into OSS, has hampered the process of harmonizing spatial data. This integration is essential to ensure that the OSS-based licensing system can function properly and is in line with the regional and detailed spatial plans.

The second step is field supervision, which is carried out periodically to ensure that activities in the field are by the permits that have been issued. In terms of supervision, the Spatial Planning Division of the Public Works and Spatial Planning Office of Serang City will supervise the results of public reports, followed up by conducting field surveys. The Spatial Planning Division of DPUPR Kota Serang has SIMTARU (Spatial Planning Information System), a web-based information system that conveys spatial planning information. The public can report spatial violations through SIMTARU (Spatial Planning Information System). The report from SIMTARU will be reviewed by employees in the field of spatial planning and then submitted to the leadership to proceed; after a warrant is obtained, the control section and the team will conduct a field survey.

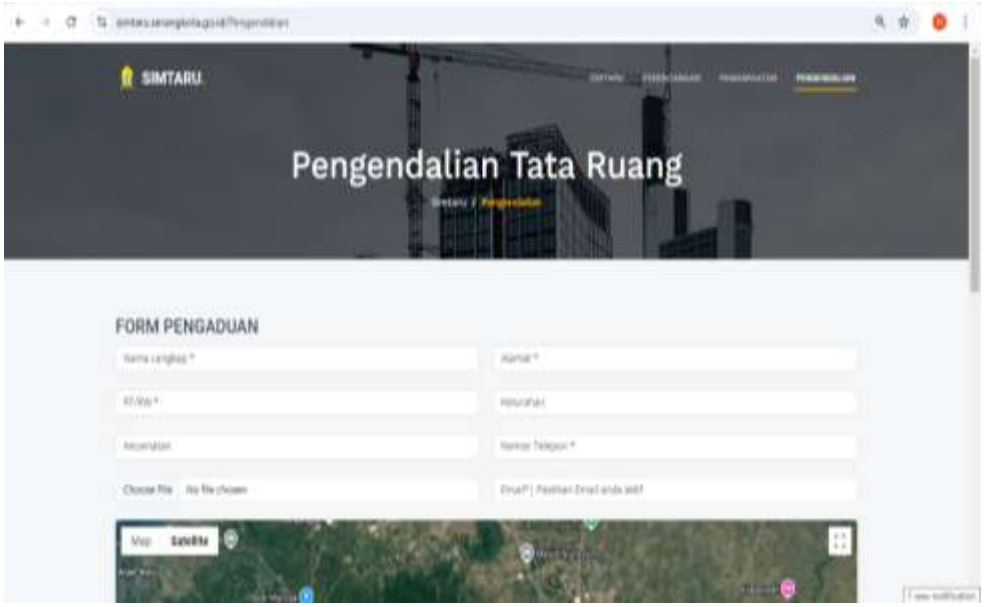

Figure 2. Control Menu on The Serang City Simtaru Website

The weak supervision and control over spatial planning, particularly in areas like river borders, railway corridors, and extra-high-voltage (EHV) overhead lines, highlights a critical gap in urban governance and spatial planning enforcement. While monitoring activities may be in place, the persistence of violations, such as buildings constructed in these restricted zones, indicates that more than merely monitoring is required. A more comprehensive and practical approach is needed to address these challenges and ensure compliance with spatial planning regulations. A more comprehensive approach that includes strengthened enforcement, technological integration, better coordination, and community involvement is necessary to ensure that spatial planning regulations are respected and effectively implemented. By addressing the root causes of weak supervision, governments can foster more sustainable urban development and protect vital natural and infrastructural assets.

Figure 3. Map of Buildings That Stand Within the Riparian Zone Map.

Figure 4. Map of Buildings That Stand in The Railroad Buffer Zone.

Figure 5. Map of Buildings That Stand in The Borders of Extra-High Voltage Overhead Lines.

Supervision of the Detailed Spatial Plan (RDTR) is essential to maintain order and sustainability of development in an area. However, weaknesses in implementing RDTR supervision are often one of the main causes of spatial violations that lead to environmental, social, and economic impacts. The factors of weak supervision are:

1. **Regulatory and Implementation Weaknesses.**

The RDTR of Serang Sub-district and Cipocok Jaya Sub-district 2013-2033 was legalized in 2014 as a derivative of the 2010-2030 regional spatial plan policy of Serang City. However, in its development, there were many changes in the latest regulations from the central government. For example, the Serang City Spatial Plan was revised in 2020, while the detailed spatial plan was still in 2014, when there was a zone change, especially in the wetland agricultural zone into a residential zone. The lack of harmonization between the Regional Spatial Plan and the Detailed Spatial Plan causes uncertainty in implementation. Central government regulations, local government regulations, and RDTR documents often need to be more consistent, making implementing them challenging. This inconsistency needs to be clarified for supervision.

2. **Limited Human Resources**

The need for more spatial supervisors relative to the size of the areas they are responsible for is critical in ensuring effective spatial planning and land use control. This gap often leads to reduced oversight and increases the likelihood of violations going unnoticed, especially in remote areas. The inadequate quantity of spatial supervisors is a systemic issue that affects the enforcement of spatial planning and land-use regulations. Addressing this challenge requires a multi-pronged approach involving workforce expansion, technological innovation, community involvement, and policy reforms. By investing in these solutions, governments can strengthen spatial supervision and ensure that land-use activities align with planned objectives, supporting sustainable development and orderly urban growth. The lack of prosecution for spatial violations—such as unauthorized development in green zones and border areas—has far-reaching consequences for sustainable development, the environment, and social equity. Strengthening enforcement mechanisms, improving legal frameworks, and enhancing political will are crucial steps in addressing these violations. By fostering a culture of accountability and compliance, governments can ensure that spatial plans are respected and the long-term integrity of the environment and urban development is maintained.

3. **Weak Law Enforcement**

The lack of prosecution for spatial violations, such as development in green zones or border areas (riverbanks, railway corridors, or protected zones), is a significant issue in spatial planning and land-use management. These violations undermine the integrity of spatial planning and have long-term negative consequences for environmental sustainability, social equity, and urban development.

4. **Lack of Modern Technology**

The underutilization of GIS (Geographic Information Systems) and drones in monitoring land use change is a significant challenge in ensuring effective spatial planning and regulation enforcement. If fully leveraged, these technologies could enhance monitoring activities' precision, efficiency, and scope, ultimately improving land-use management, ensuring compliance with spatial planning regulations, and mitigating environmental risks. Maximizing GIS and drones for land use monitoring offers a tremendous opportunity to improve spatial planning, enforce land use regulations, and protect the environment. By investing in capacity building, improving data management systems, establishing legal frameworks, and fostering coordination between agencies, governments can enhance the effectiveness of these technologies in monitoring land use changes. This comprehensive approach will lead to better land management, more sustainable development, and greater compliance with spatial planning regulations.

5. **Lack of Public Awareness**

Many communities must understand the importance of complying with spatial plans and the long-term impacts of spatial violations. The lack of community knowledge about the importance of complying with spatial plans and the long-term effects of spatial violations is a significant barrier to effective urban planning and land management. When communities are unaware of the consequences of violating spatial plans—such as building in protected areas, disregarding zoning laws, or infringing on environmentally sensitive zones—it becomes much more difficult to enforce regulations and achieve sustainable development. Governments can enhance public awareness and ensure better compliance with spatial regulations by improving community education, fostering inclusive planning processes, and leveraging technology. Empowering communities with knowledge and involving them in planning will lead to more sustainable, equitable, and legally compliant urban development.

5. CONCLUSION

In terms of supervision and control of the policies of the Detailed Spatial Plan and Zoning Regulations of Serang Subdistrict and Cipocok Jaya Subdistrict, researchers found that supervision and control of spatial planning are carried out by evaluating the realization of the Detailed Spatial Plan and Zoning Regulations of Serang Subdistrict and Cipocok Jaya Subdistrict, providing space for the community to report spatial irregularities, evaluating together with the spatial planning forum (FPR). However, supervision and control in the implementation of the policies of the Detailed Spatial Plan and Zoning Regulations of Serang Sub-district and Cipocok Jaya Sub-district are still very weak; this can be seen by the large number of buildings that stand on river borders, railway borders, borders of e-voltage electricity networks, and the existence of conversion functions in wetland agricultural zones in Cipocok Jaya Sub-district.

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