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# Environmental Legislation: a Study of the Shift of Spatial Policy in Local Regulation

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#### **ABSTRACT**

Rapid growth of urban areas all over the world causes the expansion and the use of certain areas for residency, business, and industry. For developing countries, area expansion are frequently not grounded on the comprehensive review concerning the aspects of social, legal, and environment, and are not consistent with national policies. This study aims to analyze the legal aspect regarding the spatial planning policy change from national regulation to local regulation. The analysis was conducted in Semarang City, Central Java, Indonesia. The results of this study showed that the spatial planning policy in Semarang underwent a shift in the local regulation in the level of philosophy, normative, and implementation.

**KEYWORDS** 

Environmental Law, Indonesia, Local Regulation, Shift of Spatial Policy, Spatial Legislation

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# Introduction

The basic idea of spatial planning in Indonesia as stated in the Act no 26/2007 on article 3 aims to regulate the relations between various activities and the land use in order to create effective space utilization. In spatial structure, there should be a harmony between biological and non-biological natural resources, so that space function utilization is balanced. General City Spatial Planning includes the city space utilization planning, the main structure city service planning, major transportation system planning, city network system utilization planning, water mapping planning, city service unit, and development management planning.

This study was conducted in Semarang City, Central Java, Indonesia. Some areas in Semarang have changed, for example sub district Mijen originally designed as an open space for agricultural activities transformed into residential are by the Regional Law No 2/1990; area on the north coast that should be

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conserved has been used for public interest; Genuk area which was originally designed as the embankment and residential area has become an industrial area in 1984 (Lisdiyono, 2008). An inappropriate utilization of city space is likely to affect efficiency and to cause a conflict among the residents trying to optimize their respective interests. Therefore, the spatial planning of the city is expected to prevent these problems in order for the space used by the public being more efficient and in agreement with the common interests thoroughly (Heurunan, 1999).

According to Tucker and Grim, (2003), although many policies and projects have been implemented, the essential needs of the society are still unresolved. Spatial policy shift is always arising due to social change. In addition, Lauer (2003) states that the applied laws in social order are constantly changing in sociologically. Shifting policy substance is influenced by social phenomena occurring in the community, such as solidarity, leadership patterns, occupations, prosperity, capital owners' strength, and so forth. This study attempts to analyse the shift of spatial policy. Several previous studies focused on environment aspect (Karaer et al., 2015; Goldblum, & Wong, 2000), institutional dynamic (Hudalah, Winarso, & Woltjer, 2016), conflict (Hudalah, Winarso, & Woltjer, 2016), spatial governance (Wardana, 2015), data management (Bouju, et al., 2002; Frehner, & Brändli, 2006; Marfai, et al., 2008), legal (Bedner, 2016). In addition, other studies analyzed the aspect of anthropology of a spatial planning change in Bali (Roth & Sedana, 2015; Lorenzen, 2015).

Setyono, Yunus, and Giyarsih (2016) discussed the spatial patterns of the development of big cities in Central Java and Yogyakarta, Indonesia. Moreover, Akita and Lukman (1999), Firman (2004) studied the relationship between the spatial patterns and expenditure inequalities, and demography, respectively. Moeliono (2011) analyzed the aspect of spatial management from planning to implementation. However, the aspect of regulation change was not precisely discussed. Most of the studies analyzed spatial planning from the aspect of economy (e.g Khusaini, 2015; Nugroho, 2016; Goldblum & Wong, 2000; Sjöberg, & Sjöholm, 2000). Other studies focused on social aspect (e.g. Firman, 2004). Considering that there is a few studies focused on legal aspect, this study aims to analyze the legal aspect of spatial planning. The review of a change/shift of environment regulation is important for it helps to a change in social, culture, institutional, politics, economy, and conflict between community and the government or the land users including for business and industry.

#### Legal Changes in Legislative Policy

In fact, laws have roles in a change of society and have led the community to live a better life. However, in order to expand the theoretical insights about the leading role of the law in public life it is important to explain the roles of laws. It is unnecessary to argue about how the law adapts to changes in society and how the law is the activator to a change of society.

According to Yehezkel Dror (1977), there are two roles of law in social change. First, the law is means to legitimate social change. Dror furthermore argues that this role is categorized as a traditional view of law stating that the law is created in order to control the already changed society. It means that the law legitimates the phenomena in a society (het recht hinkt achter de feiten

aan). Second, the law serves as means to induce social change (Dror, 1977). The law order in modern society, called social engineering, is used to generate directed and guided social change (Rahardjo, 1997). In addition, Podgorecki in Rahardjo (1997) suggests four principles in social engineering including the necessity of situation clarification, the analysis of values and the value levels, the hypothesis verification, and the measurement of law impacts. In employing new values in a society, the process of institutionalization and internalization is needed to build legal awareness of the society.

The law change in spatial aspect including the change in the substance of law, the structure of spatial, and the law culture. Institutionally, there are three main structures causing the change in the substance of law including legislative body, law institutions, and law executors (Dror, 1977). However, there are several administrative bodies taking parts in formulating, implementing, and executing law, causing confusion in law change. Similarly, the change or shift in law substances including spatial planning law is determined from several perspectives including globalization, socio-culture, politics, economy, and science and technology.

### Basic Principals and Objectives of National Spatial Planning

The spatial planning in Indonesia is grounded on several basic principals including integration, honesty, fairness, and law protection. Integration principal represents the agreement in the spatial planning analysis and formulation based on the space use. The openness principal refers to the accountability and transparency of spatial planning. Spatial planning must be fairly formulated to benefit the government and the society as to perform the principal of justice. Finally, spatial planning must legally protect the government and the society.

According to Sugandhy (1994), the particular feature of spatial planning lies on the comprehensive approach including the characteristics of geography, demographics, and natural resources. Thus, the national spatial planning refers to the structures and patterns of spatial use, and the spatial relations with other regions within the scope of the national territory. Spatial planning should consider the natural environment, artificial environment, social environment, and the interaction inter-environment. National spatial planning based on the regional main function includes protected areas (protected forests, water infiltration areas, nature reserves, etc.) and cultivation areas (forests and agricultural production areas, residential areas, industrial areas, tourism areas, etc.)

Administratively, regional spatial planning national territory, provincial region level one, and district region level two. The spatial planning of administrative territory is not only oriented on the land space, but also on the seas and sky to a certain extent regulated by legislation. Based on the function and activities, regional spatial planning is categorized into rural areas, urban areas, and specific areas. There are two provisions in conducting space control. First, the space control is gradually implemented based on the duration defined in spatial planning. Second, the space control should encourage the management development of natural resources utilization by considering the factors of meteorology, climatology, and geophysics. Regional space control is carried out through the surveillance and control activities of space use. The surveillance

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activities include reporting, monitoring, and evaluation, while control activities involve the pacification of spatial use planning.

# General City Planning and Spatial Dynamics of Semarang

Budihardjo (1996) states that a city is the result of creativity, sense, will and work of the most complicated and abstruse men throughout the civilization. There are a lot of problems arise because a community has different backgrounds, visions, missions and motivations. As a result of the complexity of urban problems, an opinion arose that big cities are formed from grand accident (a great disaster) that is beyond human ability to control. However, urban managements such as scientists, experts, and professionals in urban planning, implementation, monitoring and management are challenged to cogitate an attempt to fix urban problems in Indonesia.

Hall in Budihardjo (1996), specifically states that major cities in the world drastically change as a result of restructuring the capacity system and technological revolution. The rapid development of information technology stimulates our creativity to explore technologies. That motivation encourages us to actively take part in determining the direction of urban development of Indonesia. If the land use creates conducive environment for economy, social institutions, and government agencies sectors, the development of urban are is believed to provide steady and sustainable social benefits.

In urban spatial policies, some lands in a city are used for residence, industry, services, and others. In the urban economy, there is an approach called 'economic base activities' that divides economic activities into first, basic economic activities producing and distributing goods and services outside the city. These activities are important as the basis for the city to survive and thrive. Second, non-basic economic activities produce and distribute goods and services for the residents of the city. This activity is called residential activities or service activities.

## Spatial Dynamics of Semarang

Semarang was 99.40 km² before expanded. Now, it is 373.70 km² (Statistical Office of Semarang). Semarang is divided into lowland and hilly areas. Lowland areas such as slopes that have a flat surface with the slope of 2-5% with an area of 65.22% of the entire hilly area, while the areas with the slope of 15-40% and more than 40% are usually in the form of mountains located along the edge of Kaligarang, Kali Kripik, Kali Blimbing, and Slope Gombel, Sureng Mount, Dua Gogor Mount and along the hills of Tugu, Mijen, and Gunungpati District.

Geological conditions of Semarang which are mostly made of mountainous land (the foot of Ungaran Mount) and volcanic rocky lands create problems such as the emergence of rocks with high permeability, critical slopes and unstable rocks. Those conditions create constraints for the physical development of the city. Administratively, Semarang lies about 485 km to the east of Jakarta and about 308 km to the west of Surabaya. Semarang borders Java Sea in the north, Demak Regency in the east, Semarang Regency in the south, and Kendal Regency in the west. Currently, Semarang has 16 districts and 177 villages.

The population of Semarang consists of Javanese and many other communities such as Batak/Tapanuli, Betawi, Chinese, Madura, Malay, Minangkabau, Sundanese/Priangan and others. The languages used are Javanese and Bahasa. The major religions in Semarang are Islam, Catholicism/Christianity, Hinduism, and Buddhism, and others.

Most areas of the Semarang City are a lowland area located about 4 kilometers from the coastline. Lowland city of Semarang known as "Kota Semarang Bawah" is often hit by floods because of seawater flood (rob). Meanwhile, in the southern part of Semarang city is a plateau, which is known as "Kota Semarang Atas" including Candi, Mijen, Gunungpati, and Banyumanik district. The development of Semarang city causes the needs of lands of the coastal plains. It is important because the carrying capacity of the region lies on alluvial plains as the result of coastline development or sedimentation process (Raharjo, 2007). The problem of Semarang city especially in "Kota Semarang Bawah" is that there are floods happen annually.

# **Analysis of Spatial Policy Shifts**

There are many policies (national and regional) formulated concerning the spatial and space use in Indonesia including planning, utilization, and control in the framework of national development. Sugandhy (1994) identified that spatial planning is basically a tool to raise the value of an area, space utilization is conducted in accordance of the planning, and control is conducted optimally to maintain the function of the space. Therefore, spatial planning over an area is necessary so that the natural resources of an area can be maintained to achieve harmony and balance, and does not exceed the carrying capacity of the environment.

Analysis on the level philosophy was done in the macro level to know whether there is a shift in the value system that used in formulating the law of spatial policy in Semarang city. Basically the value system is the complexity of values, norms and objectives derived from the beliefs, aspirations and needs of the community to maintain prosperous life physically and emotionally.

Law No. 26 in 2007 shows that the basic principles used in national spatial planning are integration, honesty, fairness, and law protection. Integration principal represents the agreement in the spatial planning analysis and formulation based on the space use. The openness principal refers to the accountability and transparency of spatial planning. Spatial planning must be fairly formulated to benefit the government and the society as to perform the principal of justice. Finally, spatial planning must legally protect the government and the society.

Aquinas argues that the main objective of the establishment of the law is to make the people in the community live well. The legal order is the command that comes from the intellect (and intention) of leaders given to their subordinates to create better community (Sumaryono, 1995). Similarly, Bentham (1996) states that "public goodness/utility" should be the legislator's objective, and the "public benefit" should be the foundation in formulating and implementing spatial planning policies. In textual context, it appears that spatial policy of Semarang city has a philosophical foundation which is similar to that in the national spatial planning legislation. However, the orientation of

Semarang city spatial policy is legalizing or validating banned policies rather than improving the society's prosperity.

In textual context, there is a shift in the level of philosophy of spatial planning in regional regulation PERDA No. 5 1981, PERDA No. 2 1990 and Perda No. 1 to 10 2004 about RDTRK (Detailed Spatial Plan City), stating "legalizing the change of PERDA spatial planning from public benefit oriented to the value of law". However, in reality, the change of PERDA was the result of land use banning in regional regulation. The views of policy makers in that case are dominated by classical positivism favoring the value of legal certainty. This belief is in agreement with the concept proposed by Weber stating that the procedure of formulating and implementing formal-rasionalistical law using strict deduction method is a sign of modern law.

Initially, the root of modern law suggested by Weber is capitalism. Rahardjo (1997) strengthens this theory stating that the current law system also implemented in spatial planning policy is a response to novel economic production system (capitalists). Thus, it is inevitable that the modern law system is a costruction originated from social order of Western Europe during the development of capitalism in the 19th century.

Another shift is indicated by the objective formulation of city spatial planning policy of Semarang in PERDA No 1 in 1999 and PERDA No 5 in 2004 stating that the policy formulation is not only based on the public benefit but also is capitalistic. This can be seen in several objectives formulation of spatial planning policy of Semarang including increasing the role of the city in a wider range of service as a center of development of regional development, accelerating orderly and controlled development, and improving the utilization of natural resources and artificial resources efficiently and effectively.

Theoretically, the shift in the philosophical policy of Semarang spatial is leading to capitalistic, in which sub-economic system with high-energy power will try to control the spatial planning policies of Semarang to meet the economic-capitalistic interests. This is in line with the cybernetic theory of Parsons (see Groenewald, 2013; Stewart, 2001). The analysis shows that the values in the basic principles of national spatial planning are not contributing to the formulation of regional spatial planning. This means that the roles of cultural values as justice activators are disregarded in Semarang spatial planning. This situation is dominated by high energized sub-systems such as economy and politics.

Thus, the socio-cultural subsystems relying more on "information flow" are ruled out against economic and political subsystems. The analysis of the spatial planning policy shift in terms of norms will be done at the macro level in two large groups. The first stage is analyzing the internal shift by comparing the normative substances of regional policies after the independence of Indonesia. The other stage is analyzing the external shift after the establishment of Law No. 24 in 1992.

#### Conclusion

Based on the analysis and interpretation of the study, some conclusions are drawn. Philosophically, there has been a shift in the basic principles of the Law of National Spatial Planning when it is interpreted in local spatial planning

policy (democracy and legal certainty). In the level of norm, the PERDA of Semarang tends to legitimize the government policies which favor market forces (market driven). Meanwhile, in the level of actual implementation, BWK (Urban Area Section) I to X, there has been a change in the designation of the space use, for example the approval of reclamation of the Semarang north beach, the establishment of industrial area Pedurungan, industrial area Gatot Subroto, industrial area Mijen, the establishment of Gumaya Hotel in Gajah Mada Street, the approval of number of campuses to continue operating in the area that does not match its designation, the permission given for developers to build residences in the hills which are likely to cause landslides, the development of industrial area directly adjacent to residential areas.

The spatial policy shift made a quite impact in the aspects of aesthetic, environmental devastation, and land conflict. The impact of spatial policy shift on social values is the use of space, which is unsafe, uncomfortable, unproductive, and unsustainable. Therefore, the spatial policy change must be oriented the benefit of humanity.

To cope with the problems in spatial policy-making, an ideal reconstruction is created. In the level of philosophy, relational-collective and participatory-responsive patterns should be developed in formulating the policy. The pattern of such policy is expected to harmonize natural and artificial environment, which is able to integrate the use of natural resources and artificial resources, and to provide the guidelines of the space use and prevention of negative impacts on the environment. In the level of norm, that in some provisions of law policy of urban spatial (in a PERDA; on Detailed Spatial Planning of the City) one crucial chapter is Article 5, paragraph (4) letter (c) about the potential area development should be given limitations, because it could be interpreted differently. Furthermore, in terms of procedure (in RTRW PERDA) about the intended use of space is accelerating development. This could affect the use of space affecting spatial policy changes. Finally, in the level of actual implementation, that the space use of Semarang is decreasing including the control of land limitation, the provision of green open space and public services, the treatment of floods, an observation of the field regarding the use of space which not carried out simultaneously. Therefore, in spatial policies in Semarang, there should be an article regarding the sanction for licensors and the space use unfitting to reality. Furthermore, society control on spatial policy in Semarang is needed.

This study shows that economical orientation is the theoretical framework of the shift of spatial planning policy. This means that the aspect of goodness and common usefulness is rather neglected resulting the spatial planning policies to cause environmental damage, and the emergence of structural conflicts in the area of land and other natural resources. Furthermore, this study instigates an idea to make a policy change of spatial planning of Semarang to be relational-collectivity and responsive participatory.

Some practical implications are drawn in this study. First, the findings from this study provide input pattern of spatial planning policies, from the economy oriented policy towards value-oriented policy of public benefit. Second, there should be a clear juridical guide managing the collaboration among policy makers so that there is no chance to dominate and negate each other. Third,

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public participation should be developed maximally in formulating and implementing the spatial planning policies.

#### Disclosure statement

The Authors reported that no competing financial interest.

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