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Land use change in sub district Mranggen because of residential development

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Abstract

The availability of land within the city are fixed and cannot be limited meet the needs of the population, and that causing the space to the occurrence of the function of land in suburban areas. The process of physical appearance spread outwards urban areas referred to as urban sprawl. Development of Semarang had an impact on the emergence of the region that has characterized the urban areas of the suburbs, one of them in the Mranggen Sub-district that borders the city of Semarang. The change of land use influenced by the construction of a small house on a large scale (Perumnas Pucang Gading) resulting in a change in the characteristics of land use change in Sub district Mranggen this course has specific characteristics that lead to changes in land use from village to urban areas. What kind of urban land use change that happened in Mranggen?. Methods used to analyze the development of the land over the function using a geographic information system (GIS), to describe spatial patterns that can be used to assist in decision-making in the planning area.

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1. Introduction

High utilization of land for residential areas along with increasingly high rates of population growth either naturally or migration. The increase of population by the opinion of Kivell (2003) that the population in developing countries is a major cause of the occurrence of the expansion of the city. The increase in population will increasing need for

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various facilities and means of service of the city, such as housing, social facilities, public facilities and a wide network of urban infrastructure. Also the city space is formed by two things, namely from planning resulted in a planned settlement while the urban process generates unplanned settlement according to Kostof in Sutomo (2009). The change of rural areas into urban areas formed of three processes i.e. suburbanization, the urbanization and periurbanisasi. Suburbanization is a process of changing rural into urban areas caused by the presence of the dispersion process. Suburban area that is formed is still hanging with the city core. The physical development of the city sometimes past the confines of the city itself. The size of the city continue to widen until at one point looks like a blend with the surrounding cities making two or more areas administratively (separately) but so a unity appearance urban areas (metropolitan city) with the form and functions of the characteristic buildings of the city. Over the function of land is a major problem in the process of urban development of Western countries in the 20th century was accompanied by a series of environmental issues and social economic, but it has gotten more attention (Feng, 2009).

The high population growth and dynamics of development in a city will result in the need for land will continue to evolve to a suburban area with consideration of still ample land availability, land prices are cheaper and of better environmental conditions. This condition has continued to evolve and extend so that it becomes a problem of the city. According to Yeates and Garner (1980), in addition to being caused by increased needs for space, is also caused due to changes in the ability of the transportation system, housing development and the existence of the infrastructure. Investors who developed suburban area is the most influential party against the occurrence of land over the function. Other factors that encourage the acceleration of the process of suburbanization is the ease in the ownership of a motor vehicle that supported by the availability of infrastructure of roads that facilitate access to various areas in the urban area of settlement expansion so that it became a district with low density in environments like the rural area.

The emergence of residential areas are scattered, disorganized and not integrated with each other in suburban areas appear empty spaces between either the residential or residential area between the town center. This residential area is not as the effective provision of infrastructure due to the expensive cost of procurement is not proportional to the number of users. So it's not wrong if sprawl defined as a process of growth in suburban areas leapfrog from the core city, where the growth of the city which is not compact caused the facilities and infrastructure of the city being inefficient (Burchell et al, 2005). Many towns are not aware of the occurrence of a change of control of the land; this function causes the problems posed to become very complex and difficult to resolve. So the need for the identification of the characteristics and development direction of over of land in a city function, so that local governments are ready to anticipate by making various city plans that are adaptive. This phenomenon over the function of the land is not only happening in big cities but also in smaller towns such as Mranggen. In general the existence of the function of land in an area marked by the appearance of settlements in the suburbs, similarly happened in sub-district Mranggen, the development of new settlements, the more spread especially in the region bordering the city of Semarang. Land use change on all road corridor which connects Semarang with sub-district Mranggen which was originally farmland being awakened that area used for various activities be it industrial, trade and services as well as settlements. Based on data obtained from the national land Agency of the Central Java Regional office obtained information, that in 2009 Demak over the function changing the land use of 2.317.873 m² in comparison to other districts exist around the City such as Semarang, Kendal, and Grobogan.

The changeover function the most rapid land occurs in sub-district Mranggen, this happens because of the growth of new residential areas (Perumnas Pucanggading Semarang) as well as the development of industry around Semarang-Mranggen road corridor. Cheap land prices along the road corridor Semarang Mranggen compared to the price of land in Semarang also triggers the growth of other supporting facilities such as trade, services, education and so on. In addition to the high movement of commuter heading to work towards Semarang showed the existence of dependency among Sib Mranggen the city of Semarang. Process control of land functions that occur at the Sub-District of Mranggen is in compliance with the applicable local Demak number 6 in 2011 about the Spatial Plan of the region of Demak Regency in 2011-2031 is the only rules governing the utilization of space in Demak. The regulation of those areas mentions that sub district Mranggen included into units of territorial development (SWP II) which served as a trade and service industries.

However, the process of land over the function that occurred in sub-district Mranggen indirectly pose a negative impact, among others, lack of provision of facilities and infrastructure as well as traffic congestion along the corridor. This lack of infrastructure provision requires the existence of anticipation of the Demak Regency Government to address land use before these problems more difficult to overcome. As for the questions that will answered in this research is what kind of urban land use change that happened in Mranggen?. Methods used to analyze the development of the land over the function using a geographic information system (GIS), to describe spatial patterns that can be used

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