Research Paper

Analysis of Factors Influencing the Determination of Land Compensation Value of PLN Tower on the Construction of TL 150 KV Kuala-Binjai

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ABSTRACT

The purpose of the study is to find out and analyze how much influence the distance of tower land the central business district (CBD), distance of tower land to the government office, legal aspect of tower land, distance of the tower land to the public transportation route, and road class classification on land compensation value of PLN Tower on the construction of TL 150 KV Kuala-Binjai. This research is a quantitative descriptive research. The location of the research object is in Langkat Regency and Binjai City, North Sumatra Province, totaling 40 objects of land compensation value. All populations are as samples. The analytical method used is multiple linear regression. The results showed that the distance of the tower land to the central business district (CBD) has a significant effect on land compensation value. The distance of the tower land to the government office has a significant effect on land compensation value. The legal aspect of tower land has a significant effect on land compensation value. The distance of the tower land to the public transportation route has no significant effect on land compensation value. The road class classification has no significant effect on land compensation value.

Keywords: Central Business District, Government Office, Legal Aspect, Public Transportation, Road Class Classification, Land Compensation Value.

INTRODUCTION

National development is a series of sustainable development efforts towards the life of society and the state in order to fulfill the mission of achieving national goals as regulated in the 1945 Constitution, intellectual life, world order, eternal peace, and social justice.

In the context of national development, one of the government programs is development for the public interest, which includes the construction of public infrastructure and facilities. In its implementation requires the availability of very large land. In this case, land plays an important role in development. The limited availability of land controlled by the State, often the location of the land needed is land owned by the community, not infrequently the location of development is residential settlements and people's livelihoods. To meet the needs of the land, the government needs to carry out a process called land acquisition.

The construction of the electricity infrastructure includes the construction of the Transmission Line which is a tool or vehicle that can be used to distribute electrical energy from one point to another. PT. PLN (Persero) which is the executor in the development.

The current temporary observation of the author, on the construction of the 150

KV Kuala-Binjai Transmission Line which is part of the 2016-2025 RUPTL which is the construction of a 35,000 MW power plant and a 46,000 km transmission line carried out by PT. PLN (Persero) UPP-JS Sumbagut.

According to Hardjowigeno and Sarwono (2003), soil is a series of natural and physical objects on the earth's surface, including horizontal soil that acts as a mediator for plant growth, and the environment is a combination of minerals, organic matter, and substances, will be configured water and air.

Land according to Sujarto and Djoko (1985), a land value is an economic asset that is not influenced by factors of decline in value, price and time. Physically, land is a limited asset that cannot be added to a landfill project. Although physically unable to move the Earth, its functions and uses can be changed, but the Earth itself cannot move.

Alonso (1970), defines land price as the amount paid to the land owner as the right to use one unit of land for a certain period of time. The selling price is the price the buyer is willing to pay after considering other options, the present value of the total future lease value, and the selling price and cost of ownership of the land under the lease. In this case the term land price is used interchangeably with the term land price in the analysis of urban land economic problems. The term land price may better reflect market price, selling price, and the cost of owning a lease.

Review of Reilly et al. (2001) The state explains that compensation for property damage due to partial land acquisition must also be compensated. The damage included in the remainder of the property can be assessed using a "Disposal Cost" analysis. The factors surveyed included a comparative survey of the situation before and after road construction. Furthermore, an analysis of the attributes that affect the addition or subtraction, traffic and parking is carried out. Cost impact on land use, estimated range of maintenance costs, land area received by each agency, comparison of cost impact on three consensus bases (i.e. sanctions, settlement waivers, litigation), partial land restoration and land costs in case of final settlement of restoration land. Surveys were conducted between 1982 and 1996 of thousands of land acquisitions carried out by the New Jersey Department of Transportation (NJDOT).

The purpose of the study is to find out and analyze how much influence the distance of tower land the central business district (CBD), distance of tower land to the government office, legal aspect of tower land, distance of the tower land to the public transportation route, and road class classification on land compensation value of PLN Tower on the construction of TL 150 KV Kuala-Binjai.

RESEARCH METHODS

This research is a quantitative descriptive research. Descriptive research is a type of research that aims to make a systematic, factual and accurate description of the facts and characteristics of the population of a particular area (Pandiangan, 2015). The research approach uses a survey approach. Survey research is research that takes an illustration of a population by using observations and interviews as a tool in collecting basic information and also collecting data on factors that are related to research variables (Singarimbun et al., 1995).

The location of the research object is in Langkat Regency and Binjai City, North Sumatra Province, totaling 40 objects of land compensation value.

All populations are as samples. According Pandiangan et al. (2018) in Sugiyono, sampling is the selection of samples based on certain characteristics that are considered to have relevance to the characteristics of the population that have been known previously.

Library research of reference sources is a form of research that uses library facilities by examining theoretical

discussions from various books, articles, and scientific works related to writing (Pandiangan, 2018).

The analytical method used is multiple linear regression. The research used multiple linear regression methods with ordinary least square (OLS) to find out how far the influence of independent variables on dependent variable (Tobing et al., 2018).

RESULT
Research Sites

The research location in this thesis is in the Langkat Regency area, which is shown in Figure 1.
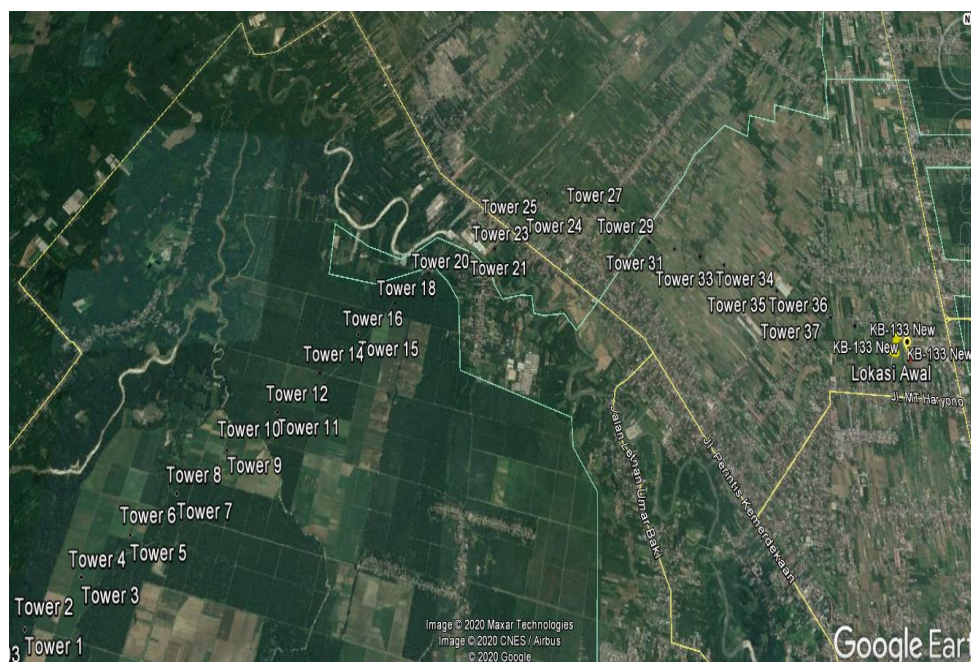

Figure 1. Research Sites

It can be seen from Figure 1 that the research location above Tower 1 – 19 is located in Tanjung Jati Village, Binjai District, Langkat Regency, Tower 20 – 21 is located in Paya Robah Village, Binjai Barat District, Binjai City, Tower 22 – 29 is located in Sendang Rejo Village, District Binjai, Langkat Regency, Towers 30 - 36 are located in Cengkeh Turi Village, Binjai District, Binjai City, and Tower 37 - 40 are located in Jati Karya Village, North Binjai District.

The dynamics of macroeconomic growth in Langkat Regency and Binjai City continue to grow, along with economic growth, of course, the need for land as capital and a medium for economic activity is increasing.

Descriptive Statistics

The process of analyzing statistical data begins with analyzing descriptive statistical data, then continues by analyzing inductive statistics.

Descriptive statistics from land market data research, it was found that with a sample of 40 (forty) in Tanjung Jati Village, Paya Robah Village, Sendang Rejo Village, Cengkeh Turi Village and Jati Karya Village, it was found that the indication of the minimum land compensation value was Rp125,000,-/M², the indication of the maximum land compensation value is Rp225.000/M² and the indication of the mean value of land compensation is Rp158.500/M².

t Test

In determining the effect of the independent variables, namely distance of tower land the central business district (CBD), distance of tower land to the government office, legal aspect of tower land, distance of the tower land to the public

transportation route, and road class classification to the dependent variable the land compensation value.

Table 2. t Test

Coefficients[a']						
Model,		Unstandardized Coefficients,		Standardized Coefficients,	t	Sig.
		B	Std. Error	Beta		
1	(Constant),	422070.725	21414.674		19.709	.000
	Central Business District	-441.947	47.807	-.997	-9.244	.000
	Government Office	311.536	37.282	.785	8.356	.000
	Legal Aspect	-47628.694	10535.058	-.515	-4.521	.000
	Public Transportation umum	55.884	52.832	.083	1.058	.298
	Road Class Classification	778.136	6704.427	.008	.116	.908
a. Variabel dependen: Land Compensation Value						
Source: Research Results, 2020						

The results showed that the distance of the tower land to the central business district (CBD) has a significant effect on land compensation value. The distance of the tower land to the government office has a significant effect on land compensation value. The legal aspect of tower land has a significant effect on land compensation value. The distance of the tower land to the public transportation route has no significant effect on land compensation value. The road class classification has no significant effect on land compensation value.

CONCLUSION AND SUGGESTION

The results showed that the distance of the tower land to the central business district (CBD) has a significant effect on land compensation value. The distance of the tower land to the government office has a significant effect on land compensation value. The legal aspect of tower land has a significant effect on land compensation value. The distance of the tower land to the public transportation route has no significant effect on land compensation value. The road class classification has no significant effect on land compensation value.

The following are suggestions that the author can give for this research, namely:

1. To the PT. PLN UPP-JS Sumbagut, it is recommended to take higher education and employee training in the property sector which aims to become an expert employee in the field of property appraisers who manage the assets of PT. PLN (Persero) more optimally and expertly becomes a property appraiser, especially the assessment of the tower land acquisition process.

2. The community as land owners are advised to participate in the socialization held by PT. PLN (Persero) and the government to understand and know the process in the implementation of land acquisition in the construction of TL 150 KV Kuala–Binjai.

3. To the University, it is recommended to conduct more training and research for students who discuss the process of land acquisition for the tower.

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