

The Highest and Best Use Analysis in PT Cukat Trengginas Arians Land (Case Study: Vacant Land on Flamboyan Street Medan)

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ABSTRACT

Rapid urban growth in the Medan city has caused land needs to increase. But, this is not in line with the increasingly limited availability of land. To improve efficiency on these limitations, optimalization is needed. This optimalization is in the form of land use by establishing a property that can provide benefits so that the market value of land becomes high. One of the vacant land that has not been utilized is the vacant land owned by PT Cukat Trengginas Arians which is on the Flamboyan Raya street with an area of 16000 m². Analysis of the highest and best use in land valuation is very important to consider a product development plan that is most suitable and most profitable built on it. Determining the value of land depends on land use, for that it is necessary to do the analysis of the highest and best use that is physically possible, legally permissible, financially feasible and has maximum productivity. The results study show that the three alternative land use that is modern markets, shopping areas and commercial housing have passed the physical, legal and financial aspects of the test. In the physical feasibility test, this vacant land is located in a strategic area because it is close to the regional trade and service centers in Medan City, has easy accessibility as well as a complete, adequate and in good condition. The legal aspect test results show that based on the applicable regulations in the Medan City spatial plan, the object of study is located in the trade and service zone, so that the object of study can be developed as commercial housing area, shopping area and markets. Based on financial analysis the NPV value for the modern market is

Rp3,838,318,000, for the shopping area Rp7,385,765,000, and commercial housing Rp4,434,981,000,. The NPV for the three alternative land uses is more than zero (positive) so that the shopping area is the most optimal development to be developed in the study object because it provides the highest land value Rp3,849,589/m², this value is higher when compared to the value of land in an empty state that is equal to Rp2,000,000/m².

Keywords: Highest and Best Use, Land, Physical, Legal, Financial

INTRODUCTION

Land is a unique property and has a special character, especially its nature, scarcity and usefulness. This is due to the limited land area which is relatively fixed, but the human need for land ownership tends to increase thus making land has a high economic value.

Land is something that is fundamental to human life and existence. Until now, land is still the center of attention for legal experts, geographers, social experts, economists and other experts including assessors. Because, besides being a place for humans to do all their activities, land is also a natural resource which is very important for human life.

It is appropriate that the property to be built on the land of an area can provide maximum and efficient benefits so that the results can be felt for the development of the region. Many properties that have been established on land are no longer used by

their owners for various reasons. One reason is that businesses established on the property do not benefit as expected. This happens because the property was built without using an optimum land use and use analysis (Akmaludin and Christiono, 2013).

To identify the most beneficial uses of a land, it is necessary to analyze the highest and best use of the use of an empty land or increase a property that is physically possible, legally permitted, financially feasible, and has maximum productivity (Prawoto, 2014).

The use of the highest and best use analysis of a property does not depend on the subjective analysis of the owner, developer, or appraiser, but rather is determined and shaped by the existence of competitive or competitive forces and the market where the property is located. Therefore, the analysis and interpretation of the Highest and Best Use is to conduct economic studies and financial analysis on the subject of property (Hargreaves, 1990).

Highest and best use analysis in land valuation is very important to consider the most appropriate and most profitable product development planning to be built on it. Market aspects are carried out to determine the use of assets that best suits current and future market conditions. The use of the Highest and Best Use test tool is one of the measurement tools for optimizing assets which will ultimately increase the value of a property (Hidayati and Harjanto, 2003).

One of the vacant land which is not yet utilized by its owner is the vacant land owned by PT Cukat Trengginas Arians (CTA). PT Cukat Trengginas Arians (CTA) is a company engaged in the field of property based in the city of Medan. Various types of property that have been developed by PT. Cukat Trengginas Arians (CTA), which is Villa Asoka located in Pasar I Ring Road Medan, Taman Asoka Asri Housing located on Flamboyan Raya/Flamboyan I Setia Budi Medan, and Johor Asoka Housing (JOSKA) located on Sidodadi, Deli Serdang.

The vacant land owned by PT Cukat Trengginas Arians which was the object of research is located on the Flamboyan highway, Tanjung Selamat Sub-District, Medan Tuntungan Sub-District, Medan Municipality with an area of 16,000 m². The vacant land is located in a strategic location so that it has an attraction for business investment due to the potential of the land.

The various potentials owned by the vacant land, the land has the opportunity to become a property that can provide benefits so that the market value of the land will be high. Based on the Medan City Spatial Plan, especially in Medan Tuntungan sub-district, the Raya Tamboyan Raya area can function as a housing, settlement and trade area.

Alternatives that can be chosen based on market analysis in order to provide the highest level of benefits, namely as a distribution warehouse, traditional markets, shopping centers, schools, colleges and commercial housing. The alternative that has been prepared by the landowners is that the vacant land can be used as a commercial and residential business district.

The reason for choosing this location is due to the rapid growth of development that occurred in the region, but the development that occurred seemed less well planned. This is proven by the existence of buildings that are stalled, where the existence of untapped land in accordance with their functions can reduce the image of an area. This means that the land has a negative impact on the aesthetics of the region.

LITERATURE REVIEW

2.1 Property Valuation

Valuation is the process of work to provide estimates and income for the economic value of an object of valuation at a certain time in accordance with Indonesian Appraisal Standards and applicable regulations. An appraiser is someone who has the qualifications, ability and experience in conducting practical assessment activities to obtain economic value in accordance with their area of expertise (MAPPI, 2015).

2.2 The Highest and Best Use

There are many definitions of highest and best use in the assessment literature. According to Grissom (1983), quoting from The Society of Residential (SSA), the definition of highest and best use is an appraisal concept that can be applied to land or buildings that are usually interpreted as land uses that will maximize owner's wealth through the most profitable use of land.

According to Prawoto (2014) the highest and best use can be defined as a rational and legal possibility of using land or property that has been physically developed, has sufficient support and is financially feasible and produces the highest value. According to MAPPI (2015) where the definition of the Highest and Best Use in accordance with the general concepts and principles of valuation is the most possible and optimal use of a property, which is physically possible, has been adequately considered, is generally permitted, is financially feasible and produces the highest value of the property.

RESEARCH METHODS

4.1 Types and Nature of Research

The research carried out in the form of asset optimization at PT. Tuk Trengginas Arians Medan with the object of research is vacant land in Flamboyan Raya using the principle of the highest and best use, to determine the type of commercial property such as what is the most optimum on the land of the research object by analyzing based on physical aspects, legal aspects, financial aspects, and its maximum productivity aspects.

This type of research is a comparative descriptive study using quantitative data, where the observed indicators are relatively fixed, concrete, measurable and the symptoms are causal. The data collected was analyzed using statistics and econometrics so that it can be concluded that the hypotheses that were formulated were proven or not (Sugiyono, 2012).

4.2 Research Location and Time

The vacant land that is the object of this research is in Flamboyan Raya, Tanjung Selamat Sub-District, Medan Tuntungan District, Medan Municipality with an area of 2,000 m². This research was conducted in April 2019 until June 2019.

4.3 Population and Sample

According to Sekaran and Bougie (2013), population refers to the whole group of people, events or interests that the researcher wants to know, while the sample is a subgroup or part of the population. By examining the sample, a researcher can draw conclusions that can be generalized to the entire population.

The population in this study are all business actors, stakeholders or stakeholders who will be in direct contact with the facilities to be built at these locations. The selection of respondents uses the purposive sampling method, namely by directly determining respondents who have influence and interest in the development plan of the area under study, namely the City Government (Kelurahan, Kecamatan, Bappeda, and BPPT), property practitioners (DPD REI North Sumatra), and business actors around the area of Flamboyan Raya, Tanjung Selamat Sub-District, Medan Tuntungan Sub-District, Medan City.

In determining the sample or object to be interviewed, researchers took a sample of a total population of 20 people.

4.4 Data Analysis Techniques

Data analysis in this study uses the highest and best use principle with four analysis methods, namely:

- a) Analysis of estimated market value without development using the method of comparing market data.
- b) Analysis of determining alternative types of land use by distributing questionnaires and conducting structured interviews.
- c) Analysis of the estimated market value of land by development that involves the criteria in the principle of the highest and best use that is physically possible, legally permissible, financially feasible and produces maximum profit.

d) Analysis of determining the best type of land use by comparing the market value of land without development and the market value of land with the development that has been obtained. The highest value among all land market values obtained is the highest and best use of the land.

RESULT

The Highest and Best Use Analysis

In this analysis of the Highest and Best Uses, there are four feasibility tests that must be tested, this is in accordance with the theory put forward by Prawoto (2014) that to identify the most beneficial uses of a property, the Highest and Best Uses analysis is needed, namely the use of a land vacant or increase in a property that is physically possible, legally permitted, financially viable and has maximum productivity. Based on the results obtained by researchers in the field, the results of the eligibility tests of each criterion are as follows:

1. Physical Feasibility Test

The feasibility of this physical aspect is the first criterion that must be met in analyzing the Highest and Best Use of a property. These physical aspects include the location where the land is located, accessibility to location, utility, size and shape of the land as well as the total area of land.

a) Land Size and Topography

Calculation of land allocation for each alternative land use for the modern market Alternative land use as a modern market, the effective land area for kiosk construction is 64.96% of the total land area of 10,395 m², and will be built as many as 297 kiosk units with an area of 7x5 m. For public facilities, land allocation is 35.04% of the total land area of 5,605 m² with details of 15.04% for parking lots (2,406 m²), 5% for public toilets (800 m²), 5% for drainage (800 m²), 5% for mushollah (800 m²), and 5% for street lighting (800 m²). Land allocation for shopping areas is 65% (10,400 m²) for the construction of shophouses and 35% (5,600 m²) for construction of public facilities. Shops that will be built are as many as 50

units of 6x17 m shop type and 43 units of 7x17 m shop type. Land allocation for public facilities, including 15% (2,400 m²) parking area, 5% drainage (800 m²), 10% road (1,600 m²) and 5% (800 m²) street lighting. For commercial housing of a total land area of 16,000 m² that the effective land area for commercial housing construction is 60% (9,600 m²) and for public facilities is 40% (6,400 m²). Of the land area for housing construction of 9,600 m², 45 housing units of type 100 will be built with an area of 7x15 m and 40 housing units of type 125 with an area of 8x15 m. For public facilities, land allocation for parks is 10% (1,600 m²), 10% for houses of worship (1,600 m²), 5% for sports facilities (800 m²), 10% for roads (1,600 m²) and 5% (800 m²) for drainage and LPJ.

b) Land Location

The location of the object of study is very strategic, because it is on the edge of the highway and also close to strategic locations in the city of Medan, namely:

Located on the main street Flamboyan Raya and close to traditional markets, namely the jasmine market.

Adjacent to arterial roads across Sumatra, ringroad arterial roads, and Setiabudi roads Close to the Battalion Nagamas Karimata Army Battalion Army.

Close to various educational facilities such as schools and campuses, namely St. Thomas University, Santo Yoseph High School, Al-Fityan SD-IT, Quality University, Medan 1 Junior High School and 15 Medan High School.

c) Acceleration and Utility

The location of the object of this study also has access that is easily accessible by the community in Deli Serdang Regency, namely through Jalan Jamin Ginting and Tanjung Anom. The means of transportation to the location of the object of study are quite good. This can be seen from the number of public transportation that passes through the area around the land. Both the transportation that connects with regions in the city of Medan as well as transportation that connects the object of study with

regions in Deli Serdang Regency. Jalan Flamboyan Raya has one traditional market, Jasmine Market which is about 200 m from the location of the object of study. Some shopping centers such as minimarkets and retail shopping. Health facilities are also available in this area such as clinics, doctors' offices and pharmacies. The closest hospital facilities such as Class B Hospital are Bina Kasih General Hospital, Tere Margareth Hospital, Class A Hospital (Central Hospital) Adam Adam Malik and also Mental Hospital.

Educational facilities are located in the vicinity of the object of study, including a number of SD-IT, Al-Fityan SD-IT, Medan 1 Junior High School, and Medan 15 High School.

2. Legal Feasibility Test

a) Zoning

According to the Medan City Regional Regulation on the Spatial Plan for Medan City in 2015–2035, the object of study is in the trade and service area, namely the area designated for trade and service activities (including commercial housing), which is expected to be able to bring benefits to its owners and provide value added in an urban area.

b) Government Regulations Regarding Buildings

Every construction activity (which is not a residential building) must first have a building permit from the Department or the City Supervision and Development Agency.

Building permits can be in the form of the following permits:

Preliminary Permit (IP) according to the permitted stages of development.

Building Construction Permit (IMB), which is a permit granted to carry out development activities.

Special permission or building information.

3. Financial Feasibility Test

The financial feasibility test is seen from the net present value (NPV) which is the difference between a series of future receipts after being assessed now (using a discount factor) with expenditures (investments) conducted at this time and viewed from the maximum productivity test which is the value the highest land to see the maximum productivity produced.

Table 1. NPV for Each Alternative Land Use

Alternative Land Use	NPV (Rp)
Modern Market	3.838.318.000
Shopping Area	7.385.765.000
Commercial Housing	4.434.981.000

Source: Research Results

From Table 1 it can be seen that the highest NPV value is found in the shopping area which is Rp7.385.765.000, then for commercial housing which is Rp4,434,981,000 and the lowest for the modern market is Rp3,838,318,000. From the positive NPV value, it can be concluded that the three alternative selection of uses is said to be feasible and can be accepted as a development proposal.

Table 2. Land Value of Each Alternative Land Use

Description	Modern Market (Rp)	Shopping Area (Rp)	Commercial Housing (Rp)
Property Value	58,789,525,000	105,010,716,000	71,230,135,000
Building Value	20,900,187,000	43,417,281,000	30,840,400,000
Land Value	37,889,338,000	61,593,435,000	40,389,735,000
Land Value /m ²	2,368,803	3,849,589	2,524,358
Initial Land Value	2,000,000	2,000,000	2,000,000
Productivity	18.4%	92.5%	26.2%

Source: Research Results

The results of the calculation of maximum productivity, with the development of the modern market will get an increase in the value of land from an initial value of Rp2,000,000/ m² to Rp 2,368,803/m², in the sense of providing land productivity of 18.4%. With the alternative land use of

shopping areas, providing productivity of 92.5%, from an initial value of land of Rp2,000,000, to Rp3,849,589/m², and for the development of commercial housing, an additional land value of 26.2% will be obtained from the initial value IDR 2,000,000 to Rp2,524,358/m².

Based on the results of the analysis conducted, the maximum productivity indicated the highest land value obtained by alternative land uses as a shopping area with a maximum productivity of 92.5%.

CONCLUSION AND SUGGESTION

CONCLUSION

From the results of studies conducted by researchers on vacant land located on Flamboyan Raya, Tanjung Selamat Sub-District, Medan Tuntungan Sub-District, Medan City, North Sumatra Province, the following conclusions can be drawn:

1. Based on the applicable regulations in the Medan City RTRW, vacant land located in Flamboyan Raya covering an area of 16,000 m² can be built for commercial property such as modern markets, shopping areas, and commercial housing, in accordance with the Medan City Regional Regulation on the Spatial Planning of Medan City In 2015–2035, the object of study was in the trade and service area, namely the area designated for trade and service activities (including commercial housing), which is expected to bring benefits to its owners and provide added value to an urban area.

2. Based on the results of the physical feasibility test, this credible land is located in a strategic area, because it is close to the central trade and service areas in the city of Medan, has easy accessibility, as well as complete, adequate and in good condition land use.

3. Based on the calculation and financial analysis conducted, it shows that the net present value (NPV) for the modern market is Rp3.838.318.000.

4. For the shopping area Rp7.385.765.000, and for commercial housing Rp4.434.981.000. The NPV for these three alternative land uses is more than zero, so that these three alternative proposals can each be accepted.

5. The shopping area is the most optimal development to be developed in the study object because it provides the highest

addition of land value of Rp3,849,589/m². The value of this land is higher when compared to land in an empty state that is equal to Rp2,000,000/m².

SUGGESTION

1. Before development is carried out on the object of study land, the developer should conduct a feasibility study, and take care of all necessary permits.

2. For property managers, it is better before developing an unproductive land that needs to be done an analysis of the highest and best use of a land so that the selection of alternative land uses can provide the best results.

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