

An Influence Of The Development Of Outer Ring Road Gorontalo

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Abstract: Increasing the economy of the population and the region affects the dynamics and development of community activities and encourages the improvement of transportation infrastructure development in Gorontalo Province. GORR development is a road infrastructure that brings land function change, land value and indirectly affects the socioeconomic condition of society. The change of land value was analyzed by qualitative descriptive analysis approach, aimed to find clarity as to the extent of its influence on land value change. The results showed that the largest land conversion function was productive land of mixed and wetland gardens, with an increase in values ranging from 3 to 4 times. The socioeconomic conditions of the community are improving and affecting the increase in Locally Tax Revenue (LTR) and the public are satisfied with the value of land acquisition for GORR development.

Keywords: Infrastructure, Transportation, Land Function, Land Economy

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I. Introduction

Infrastructure development can support and encourage better community life, modernization, institutional change in developing community accessibility and mobility [1,2,3]. Development in Gorontalo Province is an effort to serve the community in improving social, economic, and cultural life. Road infrastructure development is a priority, plays a strategic and vital role in supporting the mobility of people, inter-regional commodity trade and accelerate the process of regional development and regional growth [4,5,6]

In line with economic growth, traffic volume, vehicle numbers is increasing in growth and impact on high traffic load of urban and inter-regional roads. This affects the movement of traffic to the national road network centers as a consequence of the interaction of the access road network of Central and North Sulawesi, which is predicted to increase the traffic load on the inner city road. To anticipate within the framework of efficiency and effectiveness of road users and other community benefits in supporting the community's economy, the government built Gorontalo Outer Ring Road (GORR) [4,8,9]. The road is parallel to the national arterial road and serves as the liaison of Jalaluddin Airport - Gorontalo City - Port, and is expected to improve the economy of Gorontalo Province especially Gorontalo City, Bone Bolango Regency and Gorontalo Regency. The GORR road passes through plantation areas, fields, shrubs, rice fields and settlements as well as through extreme topographical areas requiring excavation, steep river / bridge / cliffs and pile work with a depth of 30 m [4.7].

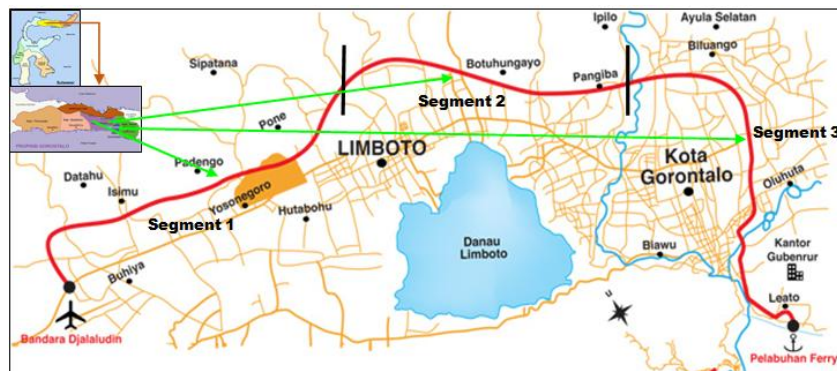


Figure 1. Map Location GORR

The development of GORR brings about changes in function, the value of land and indirectly affects the social and economic conditions of the community. Changes in land use cannot be avoided to fulfill community needs and increase mobility of community movements. Land use changes affect the value of land production, market price, production cost and transportation based on marketing distance [2,10,11,12].

This research aims to find clarity of how the conversion of land functions into a way of influence on the Sales Valus of Taxtable Object (SVTO) land, the ratio of land acquisition value to the perception and satisfaction of the community to the value of land change and socioeconomic conditions of society due to GORR development. The approach used is descriptive qualitative, research population is a landowner community in GORR network (STA 15 + 700 - 29 + 700) that experience land function change. The largest population is 480 households and using 83 households with the hope of error rate of 10%.

II. Results And Discussion

Area of Land Function Changes

The land that changed the function to GORR of 87 ha located in Limboto, Telaga Biru and Telaga sub-districts consist of the settlement area, mixed garden, empty land and rice field as in Table 1.

Table 1. Percentage of Area and Price Land Change by Function and Location

Land Function	Percentage Area and Land Price Change						Land GORR (87 ha)	
	Limboto		Telaga Biru		Telaga		Land Area	Land Price
	Land Area	Land Price	Land Area	Land Price	Land Area	Land Price		
Settlement	7,62	250	8,32	175	7,84	367	23,78	262
Mixed Gardens	21,70	525	19,70	213	2,16	200	43,56	392
Vacant land	6,41	650	9,84	525	2,82	400	19,07	549
Rice fields	4,42	200	-	-	9,17	233	13,59	222
Total	40,15	456	37,86	286	21,99	304	100	356

In addition to the natural environment of vacant land (19.07%) affected by changes in land function of GORR development, there are also land use impacts on productive land of mixed and rice fields (57.15%) and settlement land (23.78%). The value of land increases with the construction of roads and improvements in transport services [12,13,14,15]. Changes in price or value of land with SVTO indications and market prices vary according to the proximity of the growth centers, the activities of the sub-sub-regions of the embryo of economic growth [14].

a. Land Value by SVTO

SVTO at the research sites increased by 1 to 2 classes by reference to the Regent Regulation, the determination of SVTO values varied with the Land Value Zone (LVZ), location and distance to the center of economic, social and cultural activities and influenced by regional topography and soil quality [10,14]. The SVTO value of land by distance from the centers of activity is shown in Figure 2.

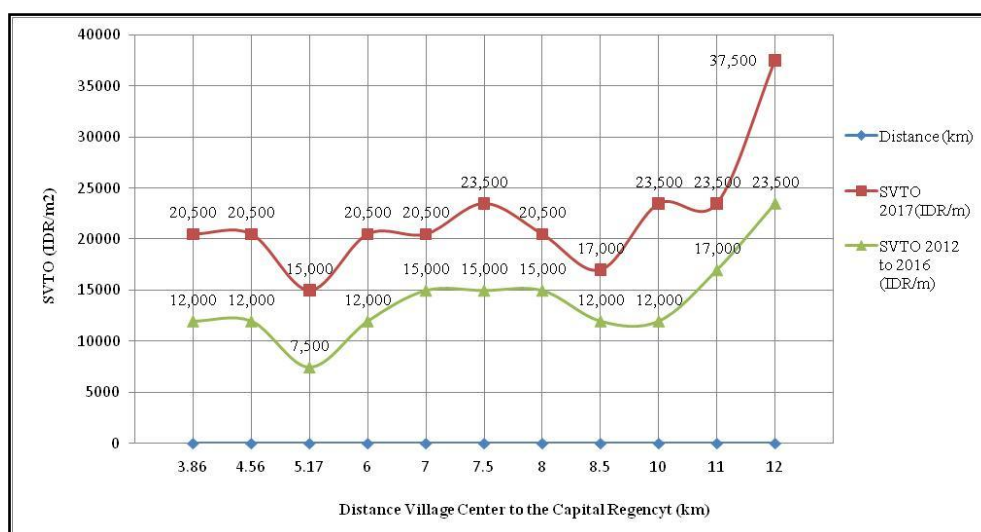


Figure 2. SVTO value based on distance period 2012 until 2017

SVTO Biyonga Sub-district and Bulota located at a distance 3.86 km and 4.56 from the centers increased activity in the year 2017, the two areas are relatively flat topography and located near the district

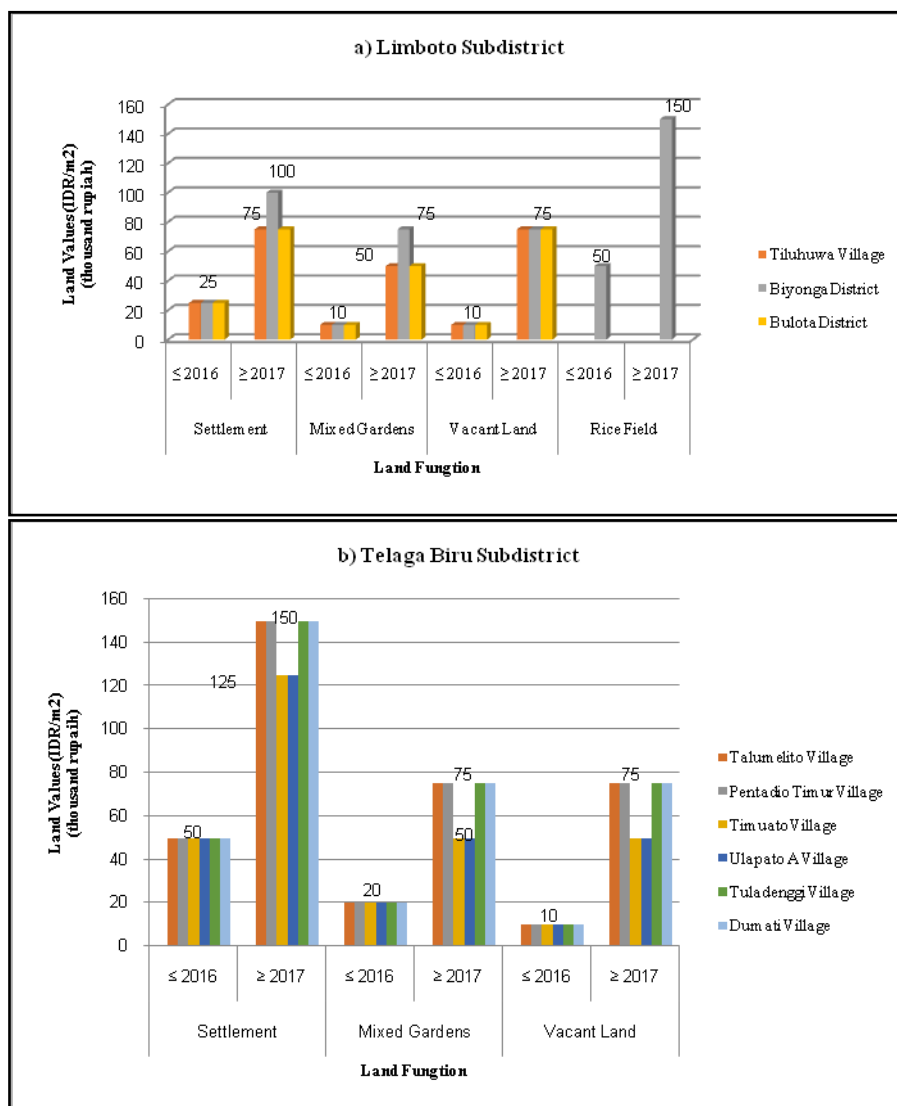
center. SVTO in Tilihuwa is located at a low distance of 5.17 km as it is relatively far from the district center and the hilly land contour condition.

Talumelito and East Pentadio villages are characterized by a high plateau region, high community activity, social and public facilities, Talumelito Regional Landfills, Indonesian Agency for Meteorology, Climatology and Geophysics or simply BMKG Office and the campus of Muhamadiyah University of Gorontalo.

The village of Timuato, Ulapato A, and Tuladenggi, the village center is on the side of Trans Sulawesi road, its economic activities are based on the household industry and small industry [8]. SVTO in Ulapato A, and Tuladenggi villages is lower than that of Timuato village, influenced by topographies that are partly located in the highlands. SVTO in the villages of Dumati, West Pilohayanga and Pilohayanga are affected by relatively flat topography and the location closer to the boundary of Gorontalo City.

Land Price in GORR Region

Prior to the construction of outer ring road access, the value of land transactions was relatively low, the value of land, depending on the location of road access, land function, environmental conditions and topography. After the development process of GORR access the value of land has increased significantly, as in Figure 3.



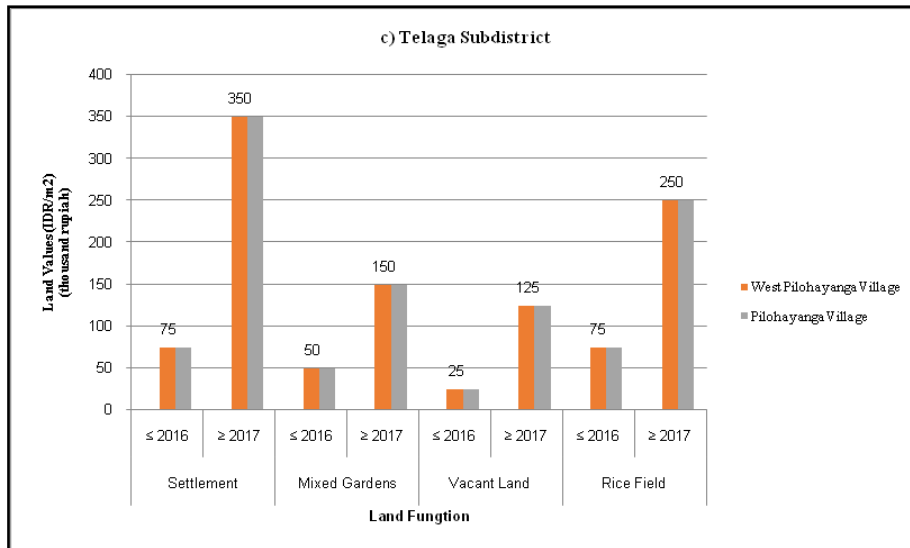


Figure 3. Land values by function and location: a) Limboto Subdistrict; b) Telaga Biru Subdistrict; c) Lake Subdistrict

The price of land in Telaga Biru sub-district tends to be low compared to other sub-districts. This is influenced by hilly topography conditions. The price of land in Limboto sub-district is quite high because of the regency capital distance to the center of socioeconomic activity closer. The same thing in the Telaga sub-district, which is closer to the border of Gorontalo City is a factor influencing land price increase.

Land Acquisition and Public Satisfaction

The value of land acquisition for the construction of the ring road varies greatly, depending on location, type of utilization, regional topography and land ownership status and distance from the center of activities. In general, the value of the exemption for settlements and mixed gardens is relatively low compared to the perceptions of people's wishes and vacant land value over the landowner's expectations. In contrast to the owners of rice fields, the value of land acquisition is considered lower than the public expectations, causing dissatisfaction and rejection upheaval to result in delays in employment. The low value of land acquisition is also influenced by the status of land which is mostly state land ownership status.

The comparison of liberation value with the expectation of the people's desire becomes an indicator of community satisfaction with the value of land acquisition provided by the government. In general, the expected value of land compensation to the community is indicated to be satisfied, especially the empty landowner community, the dissatisfied people are the people who own the rice fields, mixed gardens and settlements. The difference between the value of liberation and community perception is due to the lack of socialization on how the land is assessed. The assessment team undertook separate assessments of land, buildings and plants. Analysis of High and Best Use seen from the condition of the land in an empty state without buildings and plants.

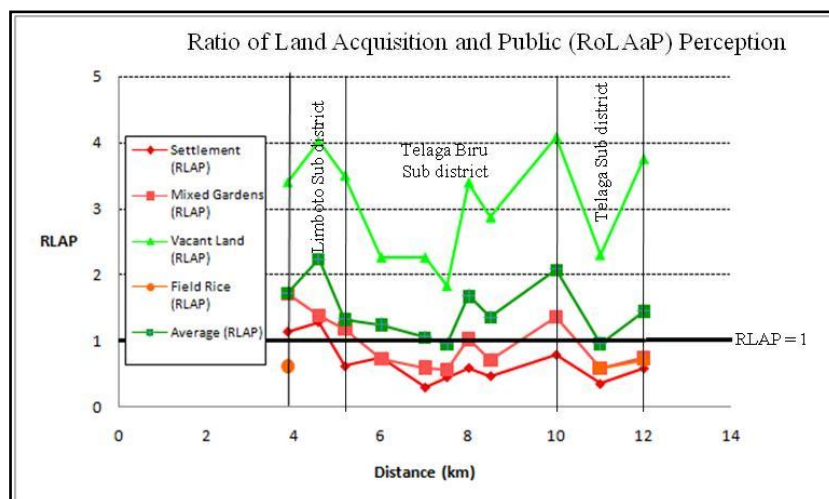


Figure 4. Community Satisfaction on the Value of Land Acquisition

Socio-Economic Condition of Society

In general, socioeconomic changes in the community are relatively better, most expressed satisfaction over the value of land acquisition, especially the owners of vacant land. The condition of the community house is mostly semi-permanent and is located in a mountainous area displaced by the construction of GORR, switched to building a permanent home from the land acquisition. Other exemption funds are used to purchase land in other locations, savings, business capital and children's education and other needs. Dissatisfaction of land owners of lowland and plantation estates and rejected due to livelihood concerns is lost and to buy replacement land will not be affordable anymore with the price of surrounding land.

III. Conclusions And Recommendations

Types of land use that changed function into GORR majority of productive land mixed garden and rice fields. The price of land by function and location averaged a 356% increase, so as SVTO increased by 37% - 100%. In general, people are satisfied with the value of land acquisition, especially empty landowners, except for unhappy landowners. Socioeconomic conditions of society changed to relatively better and increased accessibility, mobility and social interaction with the community. Increased economic activity in the distribution of produce and SVTO has an impact on the Locally Tax Revenues (LTR). The government should in the assessment of land prices pay attention to the economic value of land and the sustainability of livelihoods of the people in the future. Socialization and assessment agreement required by land function.

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