

The Impact of the Conversion of Agricultural Land Into a Residential Area in Suka Maju Village, Pahae Jae District, North Tapanuli Regency

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ABSTRACT

This research focuses on the impact of conversion of agricultural land into land Residential Area in Suka Maju Village, Pahae Jae District, North Tapanuli. The aim of this research is to describe the conversion of agricultural land into residential areas and to analyze the impact of land conversion agriculture in Suka Maju Village, Pahae Jae District, North Tapanuli Regency. The research method is descriptive qualitative to answer the formulation the problem of how to change the function of agricultural land into areas settlements and what is the impact of changing the function of agricultural land into a region settlement in Suka Maju Village, Pahae Jae District, Tapanuli Regency. The sampling in this research was all farmers who carried out the transfer land functions of 24 farmers. Data collection methods used in This research is an open interview and direct observation in the field. On Statistical Test using the Exel 2013 software application with data intervals. Interval data test results The overall impact of these factors on agricultural land conversion is quite large. Economic factors have an average score the most influential (4.35), followed by land condition factors (3.99), social factors (3.87) and government policy factors (3.13). These results show that Economic factors have the greatest influence on farmers who do so land conversion

INTRODUCTION

The agricultural sector still plays a strategic role that has a high impact on economic growth both in the district and provincial levels. Agriculture is a type of production activity based on the growth process of plants and animals (Soetriono, et al., 2006). The agricultural sector still plays a strategic role that has a high impact on economic growth both in the district and provincial levels. The agricultural sector is still the main source of livelihood for the majority of Indonesia's population, which is an agricultural country, so this sector is still expected to grow relatively high (Sayifullah, et al. 2018). The increasing population while the availability and area of land remain constant will result in changes in land use from less profitable activities to more profitable activities.

The conversion of agricultural land to non-agricultural use areas is increasingly common in some areas. Slowly but surely, the land that used to be green with rice, little by little began to disappear, replaced by increasingly mushrooming concrete buildings. Housing complexes, industrial areas, trade areas, and various other public facilities stand in this area. The implication is that agricultural land is shrinking, even though the population's need for agricultural commodities, most of which are materials to meet food needs, is increasing. Land use activities that are always threatened are agricultural activities that are considered less profitable than other economic activities. Specific changes from agricultural use to non-agricultural use are then known as land conversion (Wahidatul 2020).

Agricultural land is the land that is most widely converted, especially rice fields. Agricultural land, especially rice fields, apart from having economic value as a buffer for the needs of food, clothing, and housing, the community obtains agricultural land production and also functions to regulate water absorption, carbon absorption in the air. Changes in agricultural land use are a threat in themselves in achieving food security. The influence of land conversion is caused by several external factors consisting of population growth in urban areas, internal factors consisting of socio-economic conditions in households and government policies (Kustiwan, 1997). Development in Indonesia has an impact on the high land conversion that occurs, this can disrupt productivity, as a result many farmers lose their rice fields which will eliminate their income (Irawan, 2005).

The conversion of agricultural land into settlements has complex impacts, both positive and negative. The positive impacts of converting agricultural land into settlements include increasing the availability of land for settlements, increasing the economic value of land, creating jobs, meanwhile, the negative impacts of converting agricultural land into settlements include decreasing the area of agricultural land, decreasing food productivity, increasing environmental pollution based on data from the Central Statistics Agency (BPS), the area of agricultural land in Indonesia has decreased by 1.5 million hectares per year. This decline is mainly due to the conversion of agricultural land into settlements BPS in 2020 figures.

The increasing population growth rate and demand for residential land have caused very rapid degradation of agricultural land, including in Suka Maju Village, Pahae Jae District, North Tapanuli. The agricultural sector in Suka Maju Village, Pahae Jae District is a mainstay sector in shaping the economy by playing a very large role in shaping the Gross Regional Domestic Product (GRDP) in 2021. This sector includes the sub-sectors of food crops, plantation crops, livestock, forestry and fisheries. The sub-sector that makes the largest contribution to shaping the GRDP of the agricultural sector is the food crops sub-sector. This sub-sector includes rice, secondary crops, vegetables and fruits. Pahae Jae District has a fairly large agricultural land area of 1,316 hectares but continues to experience changes marked by the increasing development of settlements every year. changes marked by the increasing development of settlements every year BPS in Figures, 2021. The Pahae Jae District area has experienced a lot of decline in rice fields due to housing development. Especially in the village of Suka Maju, Pahae Jae District, North Tapanuli.

The area of Suka Maju village is 3,002 km², the population is 808 people, consisting of 393 men, 415 women and 223 families, the number of farmers is 57 families, the area of rice fields is 165 Ha, the area of residential areas is 20 Ha, the number of farmers who convert agricultural land into residential areas is 24 farmers each year the area of residential areas is increasing (Suka Maju Village in Figures, 2021). Suka Maju Village is an area with fertile agriculture, but agricultural land in Suka Maju Village has experienced a narrowing marked by the development of residential areas that began in 2021 and continued to increase until 2023. The topography of Suka Maju Village is on a mountainous slope (hilly) which is very strategic and close to public facilities such as hospitals, schools and shopping centers are the main reasons driving housing development in Suka Maju Village Suka Maju Village in Figures (2021).

The process of converting agricultural land into housing in Suka Maju Village cannot be separated from the main factor of land buying and selling which plays a role in determining land prices and then directly or indirectly will influence farmers to convert their agricultural land. Yunus (2008) argues that the thing that needs to be highlighted regarding land prices is the actor in buying and selling land. Based on their role in buying and selling land, there are 3 main factors, namely the initial land owner before development, the intermediary and the end consumer.

The decrease in agricultural land area will certainly have an impact on decreasing food productivity. This can threaten national food security. In addition, the conversion of agricultural land into residential areas can also increase environmental pollution. This is due to the increasing population and development activities in residential areas. Therefore, efforts need to be made to control the conversion of agricultural land into residential areas. These efforts can be done through, Increasing public awareness of the importance of food security, Developing residential areas outside agricultural areas, Better spatial planning. Research on the Impact of Converting Agricultural Land into Residential Areas in Suka Maju Village, Pahae Jae District, North Tapanuli Regency is important to do in order to describe the conversion of agricultural

land into residential areas in Suka Maju Village, Pahae Jae District, North Tapanuli and to analyze the impact of converting agricultural land in Suka Maju Village, Pahae Jae District, North Tapanuli Regency.

LITERATURE REVIEW

Agriculture is the main economic sector in developing countries and has an important role in economic development. Agriculture occupies a very important position and contributes to the economic development of a country (Totok Mardikanto, 2007). Added by Pratomo (2010), who stated that the agricultural sector is important to develop, this is due to several factors, namely first the agricultural sector is a source of food supplies and raw materials needed by a country. Second, the 14 major demographic pressures in developing countries accompanied by increasing income from some of the population cause these needs to continue to increase. Third, the agricultural sector must be able to provide the factors needed for the expansion of other sectors, especially the industrial sector. These factors are usually in the form of capital, labor, and raw materials. Fourth, the agricultural sector is a basic sector of important market relations that have an impact on the development process. This sector can also create forward and backward linkages which, if accompanied by the right conditions, can make a major contribution to development. Fifth, this sector is a source of income needed for development and a source of employment and income for the majority of the population of developing countries who live in rural areas (Pratomo, 2010).

Agricultural land is land used for agricultural businesses that in addition to rice fields and dry fields, all plantation land, fish ponds, livestock grazing land, scrub land, former fields and forests that are places of livelihood for those who are entitled. The function of land for the community as a place to live and a source of livelihood (Sugiyono, 2010). However, the increase in population in Indonesia means that it is not uncommon for land conversion events for housing development to increase, so that every year agricultural land is getting narrower. According to (Lestari, 2009) the process of converting agricultural land to non-agricultural uses that occurs is caused by several factors, namely social, economic, land conditions and government policies.

METHODOLOGY

This research was conducted for 1 month in June 2024 in Suka Maju Village, Pahae Jae District, North Tapanuli Regency. The majority of the population are rice farmers. The population in this study were all agricultural land owners who had converted their land into residential areas in Duka Maju Village, Pahae Jae District, North Tapanuli, totaling 24 people. Then the data analysis used for measurement used the Likert scale and interval data. According to Sugiyono (2018), the Likert scale is a scale used to measure the attitudes, opinions, and perceptions of a person or group of people about socio-economic phenomena.

RESULTS AND DISCUSSION

The conversion of agricultural land into residential areas that occurred in Suka Maju Village, North Tapanuli Regency is a conversion of land either in whole or in part from its original function, namely agriculture, which is planned to become another function, namely settlements, which if carried out continuously will have a bad or negative impact on the land and the potential of the surrounding environment. The conversion of land is carried out because of the increase in the number of needs for activities supporting community life and also the increase in population and other supporting developments so that the need for productive land or land increases every year. As a result of the conversion of agricultural land into settlements, it will involve various parties or dimensions of interest that are quite broad, meaning that it does not only reduce commodities or threaten the sustainability of food self-sufficiency but will also be related to the large number of workers which will indirectly be related to community welfare and also the quality of the environment and the social structure of the community. The impact of the conversion of agricultural land into residential areas on farmers in Suka Maju Village in this study was taken from the data from the questionnaires distributed and given to farmers in terms of social, economic, land conditions and government policies.

1. Social Factors

The impact of converting agricultural land into residential areas into residential areas seen from social factors consists of two indicators, namely education level and occupation. Education level according to Lestari in Wirawan (2016) is an activity of a person in developing their abilities, attitudes, and forms of behavior, both for future life. While work according to Kurnianto (2017) states that a person's work will be able to determine socio-economic status because from work all needs can be met. The impact of land conversion on social factors can be seen in the table below.

Table 1. The Impact of Converting Agricultural Land into Residential Areas on the Impact of Converting Agricultural Land into Residential Areas Seen From Social Factors

No	Question	Average Score	Category
1	Education	3,84	High
2	Job	3,90	High
Average		3,87	High

Based on table 1 above, it shows that the impact of agricultural land conversion into residential areas on the impact of agricultural land conversion into residential areas seen from social factors, the majority of jobs that are more impacted are with an average score of 3.90. This is because land conversion causes changes in job demands as farmers due to land conversion, reducing the availability of natural resources for farmers, reducing job opportunities in the agricultural sector, your job remains as a farmer after agricultural land conversion, feeling that there is a change in job demands as a farmer due to land conversion, land conversion can reduce the availability of natural resources for

farmers, land conversion can reduce job opportunities in the agricultural sector, your job remains as a farmer after agricultural land conversion and Land conversion can affect fundamental changes in farmer jobs can reduce the availability of natural resources for farmers,

2. Economic Factors

The impact of agricultural land conversion into residential areas seen from economic factors consists of residence and income. Residence is an area that is used as a settlement by a person to live and settle. While income is determined by the ability of production factors to produce goods and services. The impact of converting agricultural land into residential areas based on economic factors can be seen in the table below.

Table 2. The Impact of Converting Agricultural Land into Residential Areas Seen From Economic Factors

No	Question	Average Score	Category
1	Residence	4,17	High
2	Income	3,73	High
Average		3,95	High

Based on table 2 above, it shows that the place of residence has a higher impact on the conversion of agricultural land into residential areas with an average score of 4.17. This is because agricultural land has an important role for the environment and farmers, The more the population, the higher the need for housing, Ease of transportation distance and time to the farmer's housing facilities, Conversion of agricultural land cannot be avoided due to population growth and agricultural locations in the village are considered strategic so that agricultural land is more in demand to be used as settlements.

3. Land Condition Factors

The land condition factor on the impact of conversion of agricultural land into residential areas can be seen from two indicators, namely land ownership and rice fields. Land ownership is the formal control that a person has over land or land, namely the legal right to use, cultivate, sell and utilize it which can be obtained from inheritance or sale and purchase transactions (Iriani, 2008). While land is one of the natural resources and is very important for farmers. Agricultural products are not only for human consumption and life, but also as an economic source for agricultural communities (Pasaribu, 2011). For more details, see table 3 below.

Table 3. Impact of Conversion of Agricultural Land into Residential Areas Seen From Land Condition Factors

No	Question	Average Score	Category
1	Land Ownership	4,00	High
2	Rice Fields	3,98	High
Average Value		3,99	High

Based on table 3, it shows that the land condition factor has a relatively high impact on the conversion of agricultural land into residential areas and the highest of the two factors is land ownership with an average score of 4.00. This is because the land ownership factor greatly influences the impact of the conversion of agricultural land into residential areas such as the majority of land owned by the owner, land conversion can reduce the area of agricultural land available to farmers, whether land conversion has a positive impact on the surrounding environment, has owned agricultural land for a long time and has decreased after land conversion.

4. Government Policy Factors

Government policy factors on the impact of the conversion of agricultural land into residential areas can be seen from government regulations. The government regulation that caused the conversion of land in Suka Maju Village is Law Number 2 of 2012 concerning Land Acquisition for Development for the Public Interest. This regulation contains appropriate and fair compensation to the entitled parties in the land acquisition process. Compensation as an effort to realize respect for the rights and interests of individuals that have been sacrificed for the public interest, can be called fair, if it does not make someone richer, or conversely poorer than their original state (Sumardjono, 2008). More details can be seen in table 4 below.

Table 4. Impact of Conversion of Agricultural Land into Residential Areas Seen from Government Policy Factors

No	Question	Average Score	Category
1	Government Regulations	3,81	High
Average Value		3,81	High

Based on the results of the descriptive analysis of the impact of the conversion of agricultural land into a residential area for farmers based on government regulations, it shows a high influence, as seen from the average score of 3.81 which is included in the high category. The impact of the conversion of agricultural land into a residential area is caused by the widening of the road which has a major impact on the sustainability of farmers' houses and finally farmers convert the land into a residential area and farmers build new houses on their agricultural land. This is also supported by the notification of the intention to procure land for the construction of public roads to the community, both directly and indirectly, and the government provides compensation for the construction of new farmer houses.

Based on the factors that influence the impact of the conversion of agricultural land into a residential area in Suka Maju Village, it has a significant impact that is classified as high. This can be seen in table 5 below.

Table 5. Impact of Conversion of Agricultural Land into Residential Areas

No	Question	Average Score	Category
1	Social	3,87	high
2	Economy	4,35	High
3	Land Conditions	3,99	High
4	Government Policy	3,81	High
Average Value		4,00	High

Table 5 shows that the impact of the conversion of agricultural land into a farmer's residential area based on economic factors in the most impactful category, is said to be the most impactful because the average score obtained is 4.35 and is classified as having a very big influence on farmers who convert land into residential areas. Land condition factors in the impactful category are said to have an impact because the score obtained is 3.99. Social factors in the impactful category are said to have an impact because the average score obtained is 3.87 and government policy factors in the impactful category because the score obtained is 3.13. In the study, economic factors are the factors that have the most impact on farmers who convert land into residential areas in Suka Maju Village, North Tapanuli District, as stated by Mr. Irwan Saleh Gultom "that after the conversion of agricultural land into a residential area, the time to work can be longer in the fields because the house is close to the land" From this statement, there are various impacts caused by the conversion of agricultural land in the form of housing development in Suka Maju Village, both in terms of farmers' lives.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the research that the researcher discussed regarding "The Impact of Converting Agricultural Land into Settlements in Suka Maju Village, Pahae Jae District, North Tapanuli Regency, the researcher can draw the following conclusions. The impact of converting agricultural land into farmer settlements is mostly influenced by economic factors with an average score of 4.35. This has quite an influence on farmers who convert land. Land conditions 3.99 social factors 3.87. Government policies with a score of 3.13 also have an influence. Economic factors are considered to have the most influence on converting agricultural land into settlements. The conversion of land has an impact on various things, including housing development and improving the standard of living of farmers.

FURTHER STUDY

This study still has limitations, so further research is needed related to the topic of The Impact of the Conversion of Agricultural Land into a Residential Area in Suka Maju Village, Pahae Jae District, North Tapanuli Regency in order to perfect this study and increase insight for readers.

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Nainggolan, Widiasyih, Nasution, Harahap

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