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Factors Influencing Farmers' Land Function Transfer In Waiheru Village, Baguala District

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Abstract

Waiheru Village is one of the central locations for vegetable production in Baguala District, which is located not far from the city center and is busy cultivating several types of vegetables, including chilies, tomatoes, kale, long beans, spinach, mustard greens and eggplant. In reality, the vegetables being cultivated have been going well because farmers can produce vegetables in large quantities at each production time, but farmers in Waiheru Village have several limitations in terms of production factors such as land ownership (not their own and relatively small). In Waiheru Village, during the period from 2021 to 2022, the total area of farmers' land has decreased by around 5 ha, namely from 25 ha to 20 ha. In Waiheru Village there are 15 farmer groups consisting of 10 vegetable farmer groups and 5 food farmer groups. Every month each farmer group is able to produce 12-13 tonnes of leaf vegetable crops, while for fruit vegetable crops they are able to produce 5-6 tonnes every 2 months, for food crops such as cassava each year they are able to produce 30-40 tonnes at harvest time.

Keywords: Influencing Farmers' Land Function Transfer

INTRODUCTION

Each region has a goal to increase economic growth in its region. To achieve this goal, regional governments and communities must work together for economic growth in regional development. In carrying out urban development such as industry, land availability must be supported. Recently, more and more productive agricultural land has been turned into a place for physical buildings or infrastructure such as infrastructure.

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This provides an overview of the welfare of society from an economic perspective. Many agricultural lands have been converted into physical buildings such as roads, hotels, factories and so on. Apart from that, the increase in population has also resulted in a lot of agricultural land being converted into residential areas, whether developed by investors or housing itself.

With the increasing economic growth occurring in Waiheru Village, it requires the development of various infrastructure so that the demand for existing agricultural land becomes quite large. As a result, much agricultural land has changed its function to meet these needs. The conversion of agricultural land to non-agricultural land always occurs to fulfill socio-economic activities that accompany urban population growth.

The phenomenon of agricultural land conversion is the impact of the transformation of economic structure (agricultural to industrial) and demographics (rural to urban) which ultimately drives the transformation of land resources from agricultural to non-agricultural (Supriyadi 2004). A solution must be found to solve this problem because we also see the impact of land conversion which can be detrimental to farmers in particular and Indonesian society in general. There is a change in the function of agricultural land. On food and horticultural agricultural land which is the staple food for the community.

Agricultural land from 2017-2019 in Ambon City has not changed. In 2017-2019 the area of agricultural land reached 21,113 hectares. The number of farming business groups in 2019 reached 150 farmer groups, which has not changed compared to 2018. The number of farming business groups in 2017 reached 148 farmer groups, this number is 2 farmer groups less than in 2018.

Table 1.Agricultural Land Area by District in Ambon City 2017-2019 (Ha)

Subdistrict	Year		
	2017	2018	2019
Nusaniwe	5,032	5,032	5,032
Sirimau	567	567	567
South Leitimur	7,874	7,874	7,874
Ambon Baguala Bay	2,858	2,858	2,858
Ambon Bay	4,782	4,782	4,782
Amount	21,113	21,113	21,113

Source: Ambon City Agriculture Service

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Farming in Waiheru Village is one of the central locations for vegetable production in Baguala District, which is located not far from the city center and is busy cultivating several types of vegetables, including chilies, tomatoes, kale, long beans, spinach, mustard greens and eggplant. In reality, the vegetables being cultivated have been going well because farmers can produce vegetables in large quantities at each production time, but farmers in Waiheru Village have several limitations in terms of production factors such as land ownership (not their own and relatively small).

In Waiheru Village, during the period from 2021 to 2022, the total area of farmers' land has decreased by around 5 ha, namely from 25 ha to 20 ha. In Waiheru Village there are 15 farmer groups consisting of 10 vegetable farmer groups and 5 food farmer groups. every month each farmer group is able to produce 12-13 tonnes of leaf vegetable crops, while for fruit vegetable crops they are able to produce 5-6 tonnes every 2 months, for food crops such as cassava each year they are able to produce 30-40 tonnes with a harvest period of 9 month.

Formulation of the problem

1. What factors influence land conversion?

Problem Objectives

1. Know what factors influence land conversion

RESEARCH METHODS

Research Location and Time

This research was conducted in Waiheru Village, Teluk Ambon District, Ambon City, in June-July 2023 . The choice of Waiheru Village as a research location was due to several factors, namely:

1. Waiheru Village is one of the places that has been converted into land
2. Waiheru Village is the land owner and buffer in making contracts, which is not the same as in other areas where farmers have their own land.

3.2. Research Tools and Objects

Tool

1. Camera : to take pictures at the research location
2. Stationery : for recording information

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3. Questionnaire : as a question sheet or interview

The object used in this research is society In Waiheru Village , those who make a living are farmers, community leaders and village staff as information about the factors that influence land conversion .

RESEARCH METHODS

The research used is qualitative and quantitative research with the method used is a survey method where data is obtained by interviewing and filling in a list of questions, direct observation and literature.

Sampling Method

The sampling method in this research is a purposive sampling method, namely sampling carried out with several considerations and certain objectives (Juanda 2009). The population in this study were households who own food farming land in Waiheru Village . The respondents of this research were 35 households who owned food agricultural land which had been converted into other uses in each village. The informants for this research were village officials where the research was conducted, officials from the Agriculture Service as well as Bappeda of Maluku Province as policy makers. The informant of this research is the village government .

Method of collecting data

In this research, the data collection method was carried out using secondary data survey techniques. Secondary data surveys consist of institutional surveys to obtain secondary data that has relevance to discussions in research and survey literature.

Types of Data Collected

The types of data used in this research are primary and secondary data.

Primary data

Primary data will be obtained through direct observation in the field and interviews with questionnaire instruments with respondents who are residents of the study area. The primary data required is data on agricultural land ownership, respondent profiles, land

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control data for food agriculture, horticultural agriculture and data on respondents' perceptions regarding the level of land conversion and road conditions.

Secondary data

Secondary data is data from related agencies, including the Maluku Provincial Agriculture Service and other agencies related to this research. Secondary data is also obtained through library and literature studies and other data sources.

Data Analysis

This research uses an ordinal regression analysis to achieve the aim of identifying social and economic factors that influence land conversion in Waiheru Village . Social factors are measured through indicators of the area of land ownership and farming. Economic factors are measured through indicators of farmer age and farmer dependency. Meanwhile, policy factors will be measured through road condition indicators .

The data obtained in this research using quantitative analysis methods is used to determine the socio-economic conditions of farmers. The variables measured in this research are:

a. Know the trend of land area
b. Knowing farmer income and production results
c. Analyzing land prices

Operational Limitations

To avoid misunderstandings in this research, a definition and operational boundaries have been made that include the meaning required in obtaining data to carry out analysis related to problems and objectives of operational boundaries including:

1. The transfer of land function, referred to as land conversion, is a change in part or all of the land function from its original function to another function and affects the environment and potential of the land itself.
2. Land Status in Waiheru is land rented by farmers, mostly people from South Sulawesi who have lived in Ambon City for a long time, around 5-30 years from 35 respondents
3. Farming income generated from harvests for daily needs and costs incurred during the production process. The income earned by farmers is 26-60 million/year with the production results obtained by farmers

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RESULTS AND DISCUSSION

General description of the research location

Geographical Conditions in Waiheru Village

Waiheru Village is one of 4 (four) villages, 2 (two) state villages, and 1 (one) sub-district in Teluk Ambon Baguala sub-district, Ambon City. Waiheru Village is located in a coastal and highland area with an area of 2,250 hectares, and a length of around 1.5 km with a distance to the capital city of Ambon of 17 km.

Geographically, Waiheru Village borders the following areas:

a. North : Petuanan Hitu
b. South : Ambon Bay waters.
c. West : Hunut/Durian Pata Village
d. East : Nania Village

The topographic conditions of the land area of Waiheru Village are very varied, in the southern part it is slightly sloping (flat) towards the coast/beach with a slope below 2^0. Meanwhile, the northern part is sloped with an average slope above 7^0-10^0. With such topographic conditions, it is very vulnerable to the threat of disaster for residents who live in the southern region, especially residents who live around riverbanks, who are always threatened by floods due to overflowing river water when it rains at the same time as sea tides.

Social Conditions of the Community

The population growth development of Waiheru Village from 2018-2021 fluctuates greatly and shows an increasing trend in 2021. Village monograph data shows that in 2018 the population was 15,196 people with 3,770 heads of families. The impact of " *Covid-19 " has caused some people to migrate which has had an influence on population growth, but the " Covid-19 Pandemic "* is getting slower so that in 2021 the population of Waiheru Village will migrate and return to Waiheru Village so that the population will increase to 15,497 people with a total of 4,078 heads of families. KK, with an average population growth of 0.20% per year, and KK 0.25% per year. Compared to the area, the average population density of Waiheru Village in 2018 was 68 people/ha, increasing to 70 people/ha in 2021.

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Education Level

The main principle in improving the quality of human resources aims to create a path towards progress and independence. To improve the quality of human resources, the Waiheru Village government received assistance and facilities from the Ambon City government, including facilities and infrastructure for the development of basic education. Availability of facilities and infrastructure, human resources are adjusted to the classification and level of education. In 2018, community members who were classified as educational.

Entering 2021 with various dynamics in population planning will also influence changes in education classification, it is believed: PUAD 460 people, Kindergarten 740 people, Elementary School (SD) 4,692 people, Middle School 4,493 people, SMA/SMK 2,615 people, Diploma 490 people, Bachelor (S1) 588 people, Master (S2) 80 people, Doctor (S3) 30 people.

Respondent Characteristics

Farmer characteristics are a means of differentiating one farmer from another. This research will discuss the characteristics of 35 farmers which include the farmer's age, formal education, length of farming and number of family members

Farmer Age

According to Law No. 13 of 2003 Chapter 1 Article 1 Paragraph 2 states that the applicable working age limit in Indonesia is 15-64 years. This condition is closely related to the level of labor productivity in carrying out farming. Farmers who are still of productive age are likely to be able to work well and optimally because their physical abilities are higher compared to farmers of unproductive age. The younger the farmer, the more curious they are and are quicker to adopt new innovations that are more beneficial. Farmer age data.

Table 3 Age of Farmers

Age (Years)	Number (Souls)	Percentage (%)
≤ 15	0	0
15 – 64	25	71%
≥ 65	10	29%

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Total	35	100%

Source: Processed Primary Data

Based on table 3 above regarding farmers in Waiheru Village based on age, it can be seen that 25 people or 71% are productive or aged 15-64 years and farmers over 64 are not productive at work.

Formal Education

In this research, the level of education is seen from the last formal education level taken by the respondent. Someone who is highly educated will influence decision making. The data regarding the education level of respondents in this study is explained in table 4 as follows:

Table 4. Formal Education

Education	Person	Percentage (%)
No school	2	6%
elementary school	15	43%
JUNIOR HIGH SCHOOL	7	20%
SMA/SMK	10	29%
S1	1	3%
Total	35	100%

Source: Processed primary data

Based on Table 4 above, it can be seen that the level of formal education. The majority of farmers have at least elementary school education, namely 15 people (43%) middle school, while 2 people (6%) have no school, 7 people have junior high school (20%), 10 people have high school (29%) and 1 have a bachelor's degree. people (3%). So the highest level of education for most farmers is elementary school.

Farming Experience

Experience can be seen from how long farmers carry out farming activities. The longer the farmer carries out farming activities, the more experience they gain. Skills and

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transfers in carrying out farming more effectively and efficiently. The data on farmers' experiences in this research is explained in Table 5 as follows:

Table 5. Experience of being a farmer

Been a Farmer for a Long Time	Number (Souls)	Percentage (%)
3-8	18	51%
9-15	12	34%
16-30	5	14%
Total	35	100%

Processed primary data sources

Based on Table 5. Above, it can be seen that there are 18 farmers in Waiheru Village who have been farmers for more than 3-8 years (51%), 12 people (34%) have been farmers for 9-15 years. , while there were 5 respondents who had been farmers for 16-30 years (14%). So most of the farmers in Waiheru Village have been farming for more than 3-8 years.

Land Area

The area of agricultural land will influence the scale of farming and will affect the efficiency of agricultural cultivation, the area of land will influence the amount of production in farming, because the larger the agricultural land, the greater the production results and income that farmers will get. Being effective and efficient will not guarantee maximum production results, the land area for farmers in Waiheru Village is explained in Table 6 as follows

Table 6. Farming Land Area

Land Area (Ha)	Number (Souls)	Percentage(%)
≤ 0.5	0	0%
0.5 Ha - 1 Ha	25	71%
≥ 1 Ha	3	9%
Total	35	100%

Source: Processed Primary Data

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Based on Table 5, it is known that the area of agricultural land of respondents in Waiheru Village which has farmers who own land of 0.5 - 1 hectare is 25 people, while there are 3 farmers who have land ≥ 1 hectare.

Number of Family Members

The number of family dependents is the number of family members consisting of wives, children and other people who participate in the family who live in one house and eat together who are the family's responsibility. Number of dependents of respondents in Waiheru Village.

Table 7. Number of Family Members

The number of dependents	Number (Souls)	Percentage (%)
1-3	15	43%
4-6	20	57%
≥ 6	0	0
Total	35	100%

Source: Processed Primary Data

Based on Table 7, it is known that the number of dependents of respondents in Waiheru Village, if there are a large number of members, will increase the farmer's income. from the smallest number of family members 1-3 , the number of family members 4-6 is larger enough to influence the expenses or needs of farming families.

Land Ownership Status

The land ownership status of farmers in Waiheru Village is grouped into two, namely farmers renting land and farmers who farm on their own land.

Table 8. Land Ownership Status

land ownership	amount	Percentage
One's own	0	0
Land lease	35	100%

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Total	35	100%

Based on Table 8, it can be concluded that the number of farmers in Waiheru Village who own their own land is not, while the number of farmers who rent land is 35 people or 100%.

Most of the farmers in Waiheru Village are farmers who rent land, this is because almost all of the farmers in Waiheru Village are immigrants who were not born and raised in Ambon City, so they do not have access and rights to land. Therefore, they are looking for ways to get land by renting land. The size of the rental fee is influenced by the size of the land. Farmers in Waiheru village are sharecroppers who rent land for farming. The leased land that was converted by the land owner was used as a market and housing so that some farmers moved to other places.

Farmer Tribe

Farmers in Waiheru Village are migrant farmers who have lived in Ambon for a long time, around 30 years from 1994 until now, there are also those who have lived in Ambon city since 2016. So there are many farmers who come from South Sulawesi or commonly known as Makassar who become farmers in Waiheru Village.

Land Rental

Most of the Diwaiheru farmers are tenants of business land in Waiheru Village.

Table 9. Land Rental Prices

Price	Number of people)	Percentage
≤ Rp. 3,000,000	0	0
Rp. 3,000,000-5,000,000	33	94%
≥Rp. 5,000,000	2	6%
Total	35	100%

Source: Processed Primary Data

Based on Table 9, it can be seen that the rental price for land for farmers in Waiheru Village is rented at Rp. 3,000,000 – Rp. 5,000,000 as many as 33 people or

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94%. Meanwhile, farmers who rent land for a price greater than Rp. 5,000,000 for 2 people or 6% so these 2 farmers decided to move, some of them moved to Makassar, some of them moved to Makassar and the land was repurposed by the land owner.

Revenue

Farming income is obtained from the difference in production costs from farming. From the results of this research, it can be seen from the land owner's income as in Table 10.

Table 10. Average Income

Land Ownership	Average Income
Land lease	Rp. 141,000,000
One's own	Rp.0

Source: Processed Primary Data

Based on table 10. The average farming income is Rp. 141,000,000. Tenant farmers are farmers with the highest average income due to the owner and tenant contract system so farmers try to increase their production in order to cover their production costs, because farming is the main job of farmers so it is used as a livelihood for farmers in Waiheru Village.

Cross Tabulation Analysis

Table 11. Cross Tabulation

	Low	Currently	Tall	total categories
production result	1	7	27	35
land lease	12	7	16	35
income	11	6	25	42
Total	24	20	68	112

Source: Processed Daraprimer

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Based on the results of the table above, production results are categorized as high, so production results do not affect land conversion, while land rent is categorized as high, this can refer to the land area factor, with conversion, and income is categorized as high, this is because the income of farmers whose land has been converted is higher. small compared to land rent. This is related to the farmer's economy.

Factors driving the conversion of farmers' land

In general, these factors will be grouped into three, namely economy, production and land.

Economic Factors

Production results from farming activities obtained from harvest results. Production results in farming are classified as stable and farming income is also stable so that it has a positive impact on increasing production with one harvest producing 50 bunches of vegetables which are sold in the market and get 3 million - 5 million per month depending on the harvest. With farmers the main job is as a farmer.

Economic factors are the driving factor for land conversion, agricultural land being converted into Waiheru Village. The land owner wants to sell his land or build a shophouse or boarding house of ± 0.25 hectares, because the land owner's economy is not good, which makes the land owner change the use of the land. Meanwhile, the price of land sales increases every year, which was stated by the city government in 2023 that the value of land will increase with the increase in population.

Social Factors

Social factors are the driving factor for land conversion. It is stated in article 6 that all rights to land have a social function. The use of land can be beneficial for the welfare of the community. Currently, the government is interested in public needs which are of higher urgency, so the land owner must hand it over to the government, such as building a market in Waiheru Village.

The increase in residential population is estimated to cover an area of ± 5.5 hectares spread across the Cokro location, next to the Waiheru Catholic Church, the area behind the quarantine area, the area behind the Hajj dormitory and the national housing area where farming land has been converted into use, thus becoming a driving factor.

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Policy factors

The policy factor that is driving land conversion is the government's policy of building a market or public housing shop in Waiheru Village so that traders can sell their goods comfortably and not disturb or endanger road users.

So the government built the market in 2015 and expanded it in 2021 to an area of ± 0.25 hectares which was converted by the government with a budget of 1.2 billion to build the Waiheru Perumnas market in Waiheru Village.



Image of farming land and Waiheru market.

The picture above depicts farming land that was converted by the government into a market known as the waiheru perumnas market. The farming land that has not been converted is around 2.6 Ha and is still active farming land in 2014. The farming land before being converted was 3.5 Ha.

CONCLUSION

Conclusion

Based on this research, there are factors that influence land conversion. Land conversion occurs because

1. Economic factors include land conversion because land owners sell their land for their living needs because the family's economy is no longer good, land owners no longer have jobs and decide to sell their land and land conversion occurs on farming land with land prices increasing.
2. The social factor of land conversion is due to the increase in population in Waiheru Village which means that farming land is being converted by building lots of houses

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or boarding houses so that they can be occupied by residents who have bought land from land owners.

3. factors that encourage land conversion are carried out by the government so that passers are built so that traders selling on the side of the road can sell comfortably and buyers can also buy comfortably without disturbing road users as ordered by the government. Causing land conversion on farming land in Waiheru Village in the last 3 years from 2021 amounting to ± 6 Ha obtained from the Ambon City Agricultural Service.

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