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The Impact Of Farmland On The Income Of Farmers In Morokay Village, Central Maluku Regency

Muhammad Syahroni[1], A. E. Pattiselanno[2], N. F. Wenno[3]

[1,2,3]Agribusiness Study Program, Faculty of Agriculture, Pattimura University Ambon.

Email : kingalqurtubi@gmail.com , pattiselannoaugust@gmail.com, noviarfwenno@gmail.com

Abstract

The study aims to find out and know how the fields of horticultural rice plants affect the farmer's income. The sample retrieval technique used was by an impressive. sample used by a total of 33 people. The data collected is secondary and primary. The method of data analysis used is qualitative and quantitative descriptive analysis. Analysis shows that since the land functions of horticultural rice plants have a positive effect on farmers' income in morokay village, the farmers' average income from rice plants is Rp 9,237,682, and after raising the horticultural land's average value increases to Rp 33,923,348.

Keywords : Land charge, rice crop, horticultural crops, income.

INTRODUCTION

The agricultural sector is a sector that has an important role for the State of Indonesia, because this sector functions to supply food. In addition, the agricultural sector is also able to provide jobs, contribute foreign exchange through increased exports. The agricultural sector also has an important role in alleviating poverty, both by increasing the welfare of farmers and efforts to reduce poverty, especially in rural areas. (Nainggolan, 2021).

Indonesia as an agrarian country, or a lot of use farming to live and also work, in addition, the condition of the State of Indonesia which is in an astronomical location and the equatorial zone and fertile soil, making more and more agricultural land used to meet

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the needs of daily life. Currently, in general we know there are two types of land in agriculture. The agricultural land is usually widely used by the local people to grow crops and become their main income as farmers.

In general, agriculture in Indonesia is divided into two main groups, namely wet land and dry land agriculture. Wetland agriculture (rice farming) is cultivated in monoculture and intercropping. According to Maltby (1986) wetland is one of the ecosystem terms formed by the domination of water, and its characteristics and processes are controlled by water. In monoculture cultivation, paddy fields are only used for one type of plant, namely rice. In the intercropping system, usually a plot of land is used for crops other than rice, for example pulses and vegetables. Dry land farming is a type of agricultural cultivation that utilizes relatively few water resources. According to Hidayat et al (2002) dry land is defined as land that has never been stagnant or inundated with water throughout the year or all the time.

The conversion of agricultural land is actually not a new problem. In line with the increase in population and the increasing need for infrastructure such as housing, roads, industry, offices and other buildings, the need for land has increased. As a result of a very rapid economic increase, there is a lack of income in paddy field farming which is expected to cause land conversion to other agricultural crops. This problem is expected to threaten the sustainability of national rice production. The issue of changing the function of paddy fields needs attention because rice is the main food ingredient. Dependence on rice imports will increase if the issue of conversion of paddy fields is ignored.

The administrative country of Morokay is one of the villages in the North Seram Timur Kobi sub-district. So far, the majority of the people of Morokay Village cultivate paddy rice, apart from being used as a staple food source, rice is also used as a source of economic income for the community.. However, the phenomenon that is currently happening in Morokay Village is that many farmers have converted their land which was originally planted with lowland rice, now many are planted with horticultural crops. The reason for the farmers to change the function of the land is because the rice production in Morokay Village has decreased and is also caused by the high prices of pesticides and medicines.

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Table 1. Land Area, Lowland Rice Production in Morokay Village 2018-2022

Year	Land area (ha)	Production (tonnes per hectare)
2018	740	3,0
2019	680	2,7
2020	653	3,0
2021	639	2,5
2022	530	2,1

Source: (Gapoktan Morokay Village 2022)

Based on the table above, it can be explained that the area of paddy fields in Morokay Village in 2018 was 740 ha with a production of 3 tons per hectare of dry grain, then in 2019 the area of paddy fields decreased to 680 ha with a production of 2.7 tons per hectare. In 2020 the land area has again decreased to 553 ha with a production of 3 tonnes/ha. Then in 2021 and 2022 the area of land will decrease and this will also be followed by a decrease in the amount of production. There are several factors that have caused a decrease in the area of paddy rice fields, the first factor is, on business land 2 owned by farmers, now many of them are inundated by water because there is no drainage channel for irrigation water to the river, which causes water to overflow onto farmer's land, so that the impact is that the land can no longer be planted, the amount of land that is inundated every year has increased, in 2018 the amount of land that is inundated by water is 15 hectares, and in 2022 the amount of land that is inundated with water has reached 35 hectares. The second factor was caused by some farmers in Morokay Village switching from cultivating lowland rice to cultivating horticultural crops. (Gapoktan Morokay Village).

Because the land that was originally used for planting paddy rice has now shifted its function to cultivating horticultural crops, resulting in an increase in the area of horticultural crops in Morokay Village.

Table 2. Horticultural crop harvest area in Morokay Village in 2018-2022

Year	Land area (ha)
2018	54

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2019	63
2020	69
2021	75
2022	80

Source: (Gapoktan Morokay Village 2022)

Based on Table 2 above, it can be explained that the area of horticultural crops in Morokay Village has increased every year, this is because farmers who initially cultivated paddy rice are now shifting to cultivating horticultural crops on land previously used for growing rice. Therefore, farmers also change the shape of their land, which was originally in the form of a stretch of rice fields with bunds, changed to land with raised beds or piles of soil that are made elongated.

Farmers' decisions to convert land use from paddy fields to horticultural crops need to be studied in more depth whether the decisions taken by farmers to convert their land use are correct or actually make farmers' incomes decrease from the previous land.

Objectives

This article intends

1. To know the impact of the land function Agriculture from paddy fields to horticultural agriculture toward income farmer in Morokay village spooky northern kobi district

DISCUSSION

Table 3 characteristics of the respondents

Respondent				Total
category	group	Number of people)	Percentage (%)	
Age (year)	21 – 30 35 – 40 41 – 50 > 64	3 17 10 3	9,1 51,5 30,3 9,1	33
education	SD	5 8	15,2 24,2	33

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	JUNIOR HIGH SCHOOL SMA BACHELOR	19 1	57,6 3,0	
Family dependents (people)	2 – 3 4 – 5 > 5	10 17 6	30,3 51,5 18,2	33
Farming experience (year)	5 – 15 16 – 25 > 26	16 10 7	48,5 30,3 21,2	33
Land area (ha)	0,5 – 1 1,1 – 2 > 2	19 11 3	57,6 33,3 9,1	33
land status	Personal Sakap Rent	24 5 4	72,7 15,2 12,1	33

The results showed that the majority of farmers in Morokay Village were still in the productive age range. According to the Central Statistics Agency (BPS) states that the productive age category is from 15-64 years old. Based on data taken from respondents, there are 30 productive age farmers and 3 other farmers with non-productive age, namely over 64 years,

From the results of the study, it was shown that the level of education with the largest percentage was the high school level, from the 33 respondents taken, 19 farmers with a high school education level. This shows that the level of education of farmers in Morokay Village, North Seram Timur Kobi District, is quite high.

The results of the above study indicate that the largest number of dependents of farming families in Morokay Village, North Seram Timur Kobi District, is between 4-5 people, namely 17 farmers with a percentage of (51.5%) and the smallest number of dependents, namely above 5 people, namely as many as 6 people with a percentage of 18.2%.

Based on the results of the study it can be seen that the largest percentage for farming experience is in the 5-15 year group with a percentage of 48.5%, and in the second position is between 16-25 years with a percentage of 30.3%. This indicates that

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the farmers in Morokay Village have long experience in farming, high experience makes farmers more careful in making decisions about their farming.

Based on research showing that the largest percentage of land area in Morokay Village is in the 0.1 - 1 hectare group with a total of 19 farmers, then the second largest land area is found in land with an area of 1.1 - 2 ha totaling 11 people and farmers with a land area of more from 2 hectares as many as 3 people. This can be illustrated that the farmers in Morokay Village have a large enough land for farming.

Based on the results of the study, it showed that the status of the respondents' land varied, but most of the land ownership status of farmers in Morokay Village was private land, amounting to 24 farmers with a percentage of 72.7%. Then there are 5 farmers or 15.2% who are farming on sakap land, then there are also 4 farmers who are trying to farm on leased land,

Farmer's Income Before and After Conversion of Agricultural Land Functions

Seram Utara Timur Kobi District has an important role in the agricultural sector so that the government provides facilities to support agriculture in the region, one of which is the construction of an irrigation network that can flow through 4 villages namely Waiasih, Waimusi, Samal and Morokay Villages, this irrigation development certainly aims to make it easier for farmers to meet the water needs of their land, especially paddy fields, so that with the construction of irrigation, farmers do not depend on rainwater in the farming process, but what happened in their journey the results of paddy rice farming in Morokay Village were unsatisfactory, even though they had been given treatment which is the same as other villages, but the yields are still not in accordance with what farmers expect, even in 2021 when in Waiasih Village, Waimusi and Samal Village carry out a major harvest in Morokay Village, they experience crop failure.

Due to the frequent occurrence of crop failures and decreased production yields in lowland rice farming, this has caused farmers in Morokay Village to convert their land to non-rice crops in hopes of getting better results. Although the regional government of Central Maluku Regency has issued a regional regulation in 2021 concerning the protection of sustainable food-agriculture land as written in article 35 paragraph 1 which reads that land that has been designated as sustainable food-agricultural land is protected and prohibited from being converted. Even though there are regional regulations that prohibit land conversion, farmers still convert their land, this is because horticultural crops are considered more profitable than paddy rice plants.

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Farmer's Income Before Conversion of Agricultural Land

Based on the results of interviews, farmers said that the reason they did land conversion was because it was influenced by several factors. For the first factor, namely the decrease in the amount of production from paddy rice plants, where this is very influential for the income received by farmers, because with the amount of production that continues to decrease from time to time, the income of farmers will also decrease, there are 75% of respondents or 25 farmers experienced a decrease in production in the last two seasons. Then the second reason is that farming is often attacked by pests and diseases. In an effort to control pests, farmers have used various methods such as spraying with insecticides on rice plants, but pests are still difficult to control, some farmers even deliberately leave their plants just like that after being attacked by stem borer pests which farmers usually call sundep, because it is based on experience that has occurred when this pest has attacked rice plants, it is very likely that farmers will experience crop failure, because if the rice plants have been attacked by this pest, the rice plants will wither, dry and the rice grains appear white and empty. Due to these factors, it encourages farmers to switch from cultivating lowland rice to cultivating horticultural crops. We can see the income of farmers before carrying out the conversion of agricultural land functions in the table below.

Table 4. Farmers' Income Before the Conversion of Agricultural Land in Morokay Village

No	Income before land conversion (Rp)	Amount	Percentage (%)
1	3.000.000 - 6.000.000	6	18,2
2	6.100.000 – 9.000.000	9	27,3
3	9.100.000 – 12.000.000	13	39,4
4	12.000.000 – 15.000.000	5	15,2
	Amount	33	100,0

The table above shows that the income of farmers with the largest percentage is between Rp. 9,100,000-12,000,000 which amounted to 13 farmers or 39.4%. And the income of farmers with the smallest percentage is in the range of Rp. 12,000,000-15,000,000 with a total of 5 farmers or 15.2%. From the explanation above it can be seen that the income of farmers varies, this is due to various factors, namely land area, land status, amount of production, costs and also the selling price which can vary from farmer

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to farmer. if you look at the average income received by farmers in Morokay Village from rice plants, it is still relatively low, the average value of farmer receipts is IDR 30,548,182 with an average cost of IDR 21,558,197, then the average income received by rice farmers paddy fields in Morokay Village amounting to IDR 9,237,682, a very low value because this value is the amount of farmers' income in one year or two planting seasons. Therefore, to meet the needs of life, farmers have to look for side jobs such as labor work.

Farmers' Income After Conversion of Agricultural Land Functions

Farmers' income after land conversion is the income received by farmers after they switched from cultivating rice to horticultural crops. More details we can see in the table below

Table 5. Farmers' Income After the Conversion of Agricultural Land in Morokay Village

No	Income after land conversion (Rp)	Amount	Percentage (%)
1	13.000.000 – 27.000.000	11	33,3
2	28.000.000 – 42.000.000	16	48,5
3	43.000.000 – 57.000.000	4	12,1
4	58.000.000 – 72.000.000	1	3,0
5	73.000.000 – 88.000.000	1	3,0
	Amount	33	100,0

The table above shows that the amount of income with the largest percentage, namely Rp. 28,000,000 to Rp. 42,000,000, amounting to 16 people or 48.5%, for income with the lowest percentage, namely Rp. 58,000,000 to Rp. 72,000,000 and 73,000,000 to Rp. 88,000,000, each amounting to 1 person or with a percentage of 3.0%. If you look at the variation in farmers' income, this is caused by several factors such as land area, status of cultivated land, use of quality seeds, pest attacks, weather and selling price. However, based on information from interviews, the factors that most influence income from horticultural crops are weather, pest attacks and selling prices.

However, if you look at the income of farmers after land conversion is still higher when compared to farmers' income before land conversion where the average value of revenue from horticultural crop farming is Rp. IDR 51,293,364 with an average cost of

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IDR. 16,998,507, then the average income received by farmers for 1 year is IDR 33,923,348.

The Impact of Conversion of Agricultural Land Functions on Farmer's Income

The impact that occurred after the conversion of land from paddy to horticultural crops that occurred in Morokay Village, namely an increase in income received by farmers. In addition, horticultural crop farming is also more efficient in land use, where with a smaller land area, the income received by farmers is higher when compared to paddy rice farming, besides that in terms of the cost of horticultural crop farming in Morokay Village it is also more efficient. which means that the amount of costs incurred is also in accordance with the amount of income earned, in contrast to paddy rice farming in Morokay Village, where with the large costs incurred, the profits received by farmers are still very small. The following is the average value and the difference between income and farmers before and after land conversion can be seen in the table below.

Table 6 Average Income from Paddy Field Plants and Horticultural Plants in Morokay Village, Seram Utara District, East Kobi

No	Description	Average income of farmers (Rp)
1	Income before transfer of function of agricultural land	9.237.682
2	Income after conversion of agricultural land	33.923.348
Amount		43.161.030

Based on the table above, it can be seen that there is a considerable difference between farmer income before land conversion and after land conversion where farmer income before land conversion has an average value of Rp. 9,237,682, and after the conversion of horticultural crop land there is an increase revenue of IDR 24,694,666 to IDR 33,923,348. The significant difference in income indicates that the conversion of land from rice to horticultural crops actually has a positive impact on farmers, where there is an increase in income received by farmers in Morokay Village, North Seram District, East Kobi.

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CONCLUSION

The impact of land use change from paddy rice plantsto the plant horticulture on farmers' income in Morokay Village, Seram Utara Timur Kobi District, has had a positive impact. This is seen economically, where farmers before land conversion had an average income of IDR 9,237,682 then after land conversion there was an increase in income of IDR. 24,694,666 to Rp. 33,923,348. This significant difference in income can illustrate that the conversion of agricultural land that occurred in Morokay Village, North Seram Timur Kobi District, had a positive impact, namely an increase in income for farmers.

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