COMPARATIVE ANALYSIS OF RICE FARMING INCOME ORGANIC AND NON-ORGANIC IN EAST OKU REGENCY

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Article Info	ABSTRACT
Article history: Received Juni 11, 2022 Revised Juni 14, 2022 Accepted Juli 29, 2022 *Keywords:* Comparative analysis Rice farming Income Organic Non organic	*This study aims to analyze the income of organic and non-organic rice farming in Ogan Komering Ulu Timur Regency. The research method used is a survey method. The research was conducted on March 2022 in East OKU Regency. The sampling method used an unequal layered random sample method in which a population of 374 lowland rice farmers was taken using the slovin formula with a margin of error of 10% and the sample taken was 37 respondents, and 20 organic rice farmers, so the total sample is 57 people. Testing and processing of research data using statistical analysis of T test or difference test (t-test) with two averages (parired – samples T-Test) using SPSS 23. The results showed that there was a difference in income between organic rice farmers of Rp. 21. 930,748,- per year and the income of non-organic paddy rice farmers is Rp.21,411,372,- per year. Even though mathematically the household income of organic farmers is greater than the household income of non-organic farmers, statistically there is no significant or no significant difference between the income received by organic and non-organic farmers.*

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1. INTRODUCTION

Organic farming is one model of the realization of a sustainable agricultural system to increase long-term production that is sustainable and in harmony with nature. In its development, organic farming has pushed the issue of certification as a guarantee for the practice of organic farming. However, many organic farmers like in Indonesia, most of whom are small-scale farmers, find it difficult to get this third party guarantee. This is due to the high cost of certification and complicated procedures that pose serious obstacles for small-scale family farmers to obtain it (Perbatakusuma et al 2009).

There are various reasons for organic farming to be a leading agricultural policy or sustainable livelihood approach. Organic agriculture encourages the improvement of five human resources, namely the improvement of natural resources, the improvement of social resources, the improvement of economic resources, and the improvement of infrastructure resources (Saragih and Eliyas, 2008). South Sumatra is one of the provinces that contributes to national food with production levels continuing to increase every year. In 2017, the harvested area for lowland rice in South Sumatra was almost 954,000 ha, while the harvested area for lowland rice was 46,000 ha.

When compared to the harvested area of lowland rice in 2016 of 952,000 ha, the harvested area of lowland rice in 2017 increased by 0.2 percent. South Sumatra's contribution to rice production is inseparable from the role of each district as a contributor to rice production from year to year (BPS Province of South Sumatra, 2018). The role of the agricultural sector as an alternative source of income for farmers is an option that is still relevant today. It is proven that every area of South Sumatra has a large potential as a rice-producing area because most of the

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area is an agricultural area which has decreased from year to year. In 2020 rice production reached 2.69 million tons of GKG with an area of 551.24 thousand Ha and productivity of 48.92 Ku/Ha.

East OKU Regency produces the second most rice after Kab. Banyuasin which reached 629 thousand tons. This shows that East OKU Regency is one of the largest rice-producing areas in South Sumatra. This is supported by the Perjaya Dam and adequate irrigation networks. East OKU Regency as an area that has great potential in the primary agricultural sector with the leading commodity of rice has the development of an increasing number of agricultural productions. This is reflected in the large contribution of the agricultural sector to the district's GRDP, which is 32.98% of the total GRDP.

The agricultural business field until 2020 remains in the highest position when compared to other sectors. East OKU Regency is also an organic rice cluster development area in South Sumatra because the results from a survey by Bank Indonesia to a number of districts/cities in South Sumatra, only East OKU has high prospects for organic rice development. The potential for organic rice in East OKU is very promising, especially as this area is a national food barn. In addition, the local government's commitment is very high.

Andoko (2002) states, with the emergence of a tendency for people to consume agricultural products that are grown organically. If about 5 percent of Indonesia's 200 million+ population consume organic rice, it can be estimated how much organic rice is needed and demanded for the domestic market. Assuming that each person consumes 3 ounces of rice per day, it can be estimated that the amount of organic rice consumed is around 1.1 million tons per year.

Based on the structure of the costs incurred, organic farming is lower than inorganic although in conditions where the organic rice production phase decreases, whereas if efforts continue to be made to use optimum production factors, organic rice production will be higher than inorganic rice which will produce lower cost of goods, in farming the cost of goods is an important indicator, knowing the cost of farmers can determine the profit earned. In addition, farmers as price takers are very difficult to determine the selling price, with the calculation of the cost of goods, farmers can make decisions to sell or hold production (Nirwanto, 2011). Meanwhile, according to Usman (2011), the cost of goods sold is the amount of selling price in the condition of farming that can return capital or in other words this condition is when the production price BEP (Break Even Point) is reached.

Amri (2016) stated that the average total cost of organic rice farming per hectare is smaller than the average total cost of non-organic rice farming and the income per hectare of organic rice farming is greater than the income per hectare of non-organic rice farming. The risk of organic rice farming in terms of production, price and income is lower than that of non-organic rice farming which is likely to experience greater losses. Farmer's income that is not in accordance with household expenditure will result in the status of the household's standard of living. Until now, there are rarely any further studies on the income of organic and inorganic rice farming. Based on the description above, the researcher is interested in researching the Comparison of Organic and Non-Organic Rice Farming Income in Ogan Komering Ulu Timur Regency.

2. RESEARCH METHOD

The research method used is a survey method and the sampling method used is an unbalanced layered random method, where samples of organic rice farmers were taken as many as 20 people from 20 organic rice farmers and non-organic rice farmers taken 37 people from 374 rice farmers. non-organic, so the total sample is 57 people. The research was conducted on March 2022 in East OKU Regency. Testing and processing of research data using statistical analysis of T test or difference test (t-test) with two averages (parired – samples T-Test) using SPSS 23.

3. RESULTS AND ANALYSIS

a. Farm income of organic and non organic

Income in farming is also known as net profit. Calculation of farm income is done by calculating the difference between revenue and total production costs. The average income of organic and inorganic rice farmers can be seen in Table 1 below:

Table 1. The average of income of organic and non organic farming in East OKU Regency

No	Item	Organic farming		Non organic farming	
		Rp/lg/th	Rp/ha/th	Rp/lg/th	Rp/ha/th
1	Revenue	24,925,000	27,408,333	27,756,500	28,057,500
2	Production cost	5,321,432	5,477,586	5,819,066	6,646,128

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Income	19,603,568	21,930,748	21,937,434	21,411,372

Based on Table 1, the average income of organic rice farming in one year is Rp. 21,930,748. This income is higher when compared to inorganic farming income of Rp. 21,411,372. This difference is due to the higher acceptance of organic rice farming than inorganic because organic rice production is more than non-organic rice production. In addition, the selling price of organic rice is higher than the selling price of inorganic rice, thus affecting the net income received.

b. Comparative analysis of farmer's farm income

Comparative analysis of income in this study was conducted to see whether or not there is a significant difference in the level of farm income of organic and inorganic farmers in Kab. East OKU using Independent Sample T-test analysis (test of two middle values of independent variables) using SPSS 20.00 with a significance level of 0.05. Previously, a normality test was carried out to determine whether the data were normally distributed or not, where the normality test was a requirement in the t-test. If the data is normally distributed, then proceed with parametric statistical tests. The normality test was carried out using the Two-Sample Kolmogrov – Smirnov Test. The decision rule if the Asymp value. Sig. (2-tailed) > 0.05 then the data is normally distributed and vice versa if Asymp. Sig. (2-tailed) < 0.05 the data is not normally distributed. Based on the Two-Sample Kolmogrov – Smirnov Test, the Asymp value was obtained. Sig. (2-tailed) 0.978 > 0.05, it can be concluded that the data is normally distributed. Next, the Independent Sample T-test can be performed (test the two middle values of the independent sample). The results of the Independent Sample T-test can be seen in Table 2.

Table 2. Comparative analysis of farmer's farm income

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Income	Equal variances assumed	6.293	.017	-.527	38	.601
	Equal variances not assumed			-.527	33.165	.602

Based on Table 2, the comparison test of the two mean values of the independent variables obtained a sig2-tailed result of 0.601 which is greater than 0.05. The conclusion is obtained if the significance level is 0.601 > 0.05, that is, accept Ho. This means that there is no significant difference between the household income of organic rice farmers and inorganic farmers. In conclusion, although mathematically the household income of organic farmers is greater than the household income of inorganic farmers, statistically there is no significant difference or no significant difference between the income received by organic and inorganic farmers.

4. CONCLUSION

Based on the results of the study, it can be concluded:
1. The income of organic rice farming in Ogan Komering Ulu Timur Regency is Rp. IDR 21,930,748/ha/year and non-
   organic rice farming of IDR 21,411,372/ha/year
2. There is no significant difference between the income of organic rice farming and non-organic rice farming in East
   OKU Regency

REFERENCES
[1] Ahmad, S.W.N. (2016). Comparative Analysis of Papaya and Banana Barangan Farming in Deli Serdang Regency (Case Study: Negara Village, STM Hilir District, Deli Serdang Regency). Medan: USU Faculty of Agriculture.
[2] Andoko, A. (2002). Organic Rice Cultivation Mold 1. Jakarta: Self-Help Spreader.
[3] Ayatullah, M. S. (2009). Modern Agricultural Systems. http://septaayatullah. Blogspot.com/2009/05/system-farm-modern.html. Accessed: February 10, 2022.

[4] Central Bureau of Statistics. (2018). South Sumatra in Figures 2018. [Online] http://sumsel.bps.go.id. Retrieved February 2, 2022.

[5] Elias, S. (2008). Organic Agriculture Solutions for Harmonious and Sustainable Living. Jakarta: Self-Help Spreader.

[6] Husin, L and Lifianthi. (2008). Agricultural Economics. Indraalaya: Faculty of Agriculture, Sriwijaya University.

[7] IFOAM. (2008). Principles of Organic Agriculture. In : IFOAM General assembly, 2008 Adelaide. 1-4.

[8] Kennvidy, S.A. (2010). Organic Rice Farming Systems in Cambodia: Potential and Constraints of Smallholder Systems in Takeo. International Journal of Environmental and Rural Development, 1(1), pp. 62–67.

[9] Kindangen, J. (2010). Journal of Prospects for the Development of Food Agroindustry in Increasing the Income of Farmers in Southeast Minahasa Regency, Center for the Study of Agricultural Technology (BPTP) North Sulawesi.

[10] Nirwanto, R. (2011). Comparative Analysis of Cost of Production and Patterns of Profits in Rubber Breeding Companies and Smallholders in Teman Village, Lubuk Linggau City. Thesis (Unpublished). Faculty of Agriculture, Sriwijaya University.

[11] Nugroho, J. (2013). Analysis of Organic Rice Farming in Mojogedang District, Karanganyar Regency. Thesis (Published). Eleven Maret University, Surakarta.

[12] Purwono and Purwati. H. (2007). Cultivation of 8 types of superior plants. Jakarta: Self-Help Spreader.

[13] Rahardja and Mandala. (2006). Microeconomic Theory An Introduction. Jakarta: FE UI Publishing Agency.

[14] Sjarkowi, F. and M. Sufri. (2004). Agribusiness Management. CV Baldat Graffiti Press. ISBN 979-96207-1-6. Palembang.

[15] Soekarno. (2002). Basic Principles of Agricultural Economics: Theory and Application. Jakarta: PT. King Grafindo Persada

[16] Soekarno. (2005). Basic Principles of Agricultural Economics. Jakarta: PT. King Grafindo Persada.

[17] Sudjarmoko, B. (2011). Business Scale and Relative Economic Efficiency of Coconut Cultivation at Farmer Level in Tasikmalaya Regency, West Java. Littri Journal. Vol. 4. No. 5 : 140 -145.

[18] Sugiarto et al., (2002). Microeconomics A Comprehensive Study. Jakarta : PT. Main Library Gramedia.

[19] Sugiarto. Herlambang, Teddy. Brastoro. Sudjana, Rachmat. and Kelana, Said. 2007. Microeconomics. Jakarta: PT Gramedia Pustaka Utama

[20] Sukirno, S. (2014). Microeconomics third edition. Jakarta : PT Raja Grafindo Persada.

[21] Sutanto, R. (2002). Application of Organic Agriculture. Yogyakarta : Kanisius