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Farmer Perception Of Organic Rice Farming In Subur Farmers Groups, Lubuk Bayas Village, Perbaungan District, Serdang Bedagai Regency

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Abstrak: The study was conducted using a case study method. Aimed at finding out, income, production level, Break Event Point (BEP) and farmers' perceptions of organic rice farming in the Subur Farmers Group, Lubuk Bayas Village, Perbaungan District, Serdang Bedagai Regency. The sampling technique is saturated sampling (census), if all members of the population are used as samples. As many as 30 respondents in the Subur Farmers Group have implemented organic rice farming. Data collection methods are primary data obtained directly from farmers and secondary data obtained from relevant agencies such as the Central Statistics Agency, Subur Farmers Group Documents and the Head Office of Lubuk Bayas Village. The analytical method used is descriptive and qualitative which is quantitative. This research was conducted in March 2019 in Lubuk Bayas Village, Perbaungan District, Serdang Bedagai Regency. The first problem research results are known that the average farmer's income is Rp. 15,905,000, the total production cost incurred in the amount of Rp. 6,973,357 and the income earned is Rp. 8,931,643. For BEP Production results obtained an average of 678 kg, BEP Price of Rp. 2,670 while the BEP Receipt was Rp. 3,808,610. The second research result is known that farmers have a very effective perception on the benchmark Price (82.26%), Environmentally Friendly (84.8%) and Production Costs (80.11%). While Marketing (74.13%), Mutu and Quality (68.53%) included in the effective category.

Keywords: Organic Agriculture, Income, Farmers Group and Perception.

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Introduction

Indonesia, as one of the developing countries with agriculture as the main source of livelihood of its population. The fact that occurs that most of the land in the territory of Indonesia is designated as agricultural land and nearly 50% of the total workforce is still dependent on working in the agricultural sector. In addition, the agricultural sector is one sector that produces inputs or raw materials for the industrialization process. This situation demands that economic development in Indonesia must be based on sustainable agricultural development.¹

The agricultural sector is still excellent, especially the many farmers who plant conventional rice but using chemical fertilizers. Indirectly it will cause harmful impacts on the environment in the future. To overcome this, in order to be sustainable the motto of back to nature is now being echoed by planting organic systems to reduce chemicals. Organic farming is a holistic production management system to improve and develop agroecosystem health, including biodiversity, biological cycles, and soil biological activities. ²

Indonesia organic farming was known in the early 1990s. For a long time our ancestors planted naturally without using factory-made fertilizers and natural pesticides. Speaking of organic agriculture in Indonesia is inseparable from the name of Pastor Agatho Elsener, a pioneer of organic agriculture. As in foreign countries, the emergence of organic agriculture in Indonesia is also driven by human awareness to consume agricultural products free of pesticide residues and to preserve the environment. Organic agriculture is increasingly gaining momentum as the 1997 economic crisis arose, which inflated the price of saprotan (agricultural production facilities) such as chemical fertilizers and chemical pesticides. Saprotan prices reach uneconomic levels in agricultural activities. With expensive saprotan prices, of course, cause a decreased level of profit

In principle, organic agriculture is in line with the development of agriculture with low input technology and efforts towards sustainable agriculture. We are beginning to realize about the potential of technology, environmental fragility and the ability of human cultivation to damage the environment. One thing to note is that there are limits to the availability of natural resources. There are three agreements that must be implemented in sustainable agricultural development: (i) agricultural production must be increased but efficient in the use of resources, (ii) biological processes must be controlled by the agricultural system itself (not dependent on inputs from outside agriculture), (iii) nutrient cycling in the agricultural system must be improved and more closed.⁴

Organic rice systems undergo a space-intensive and efficient method of rice farming based on the management of plant interactions with its bioreactor which includes a space cycle mechanism built by organic compost and a life cycle built by seedlings of local microorganisms. ⁵

Farmer group is an organization consisting of farmers who have the same views and needs can be used as a container in developing and implementing activities. Therefore the role of farmer groups in the form of motivating activities is urgently needed in order to better direct the efforts of farmers in order to change and increase farm income.⁶

The Subur Farmer Group is the only farmer group to apply organic rice farming in Lubuk Bayas Village, Perbaungan District, Serdang Bedagai Regency out of 7 farmer groups in the area. The rice varieties they plant are: Cintanur, Red, Black, Hawang, Pandan Wangi.

Serdang Bedagai Regency has great potential for business development in agriculture. According to the Central Statistics Agency (BPS) of Serdang Bedagai Regency in 2015, the area of paddy fields at that time was 39,191 hectares and Perbaungan District was the biggest contributor to paddy rice production which was 76,084 tons. This is a great opportunity to develop rice farming organically to see this data.⁷

In this study, researchers tried to determine the level of production, income and the level of Break Event Point (Break Point) at each component of price, production and revenue. In addition, researchers revealed some of the farmers' perceptions of organic rice farming including, Mutu and Quality, Price, Marketing, Environmentally Friendly, and Production Costs.

Methods

This research uses a case study. Case study is a method that explains the type of research on a particular object during a certain period of time or a phenomenon that is determined at a place that is not necessarily the same as other regions.

Location Determination Method

Determination of the location of research carried out purposively (deliberately) and based on consideration in accordance with the characteristics of the study. As many as 30 farmers are known to apply organic rice farming. The location determination was taken in Lubuk Bayas Village, Perbaungan District, Serdang Bedagai Regency, because the village was one of the pioneers in the application of organic rice farming in North Sumatra.

Method of collecting data

To collect this research data, researchers used primary data obtained from conducting interviews, questionnaires and direct observation with farmers in the study area. And researchers used secondary data obtained from the Central Statistics Agency (BPS) of Serdang Bedagai Regency, the Office of the Head of Lubuk Bayas Village and the Subur Farmers Group Document.

Data Analysis Method

To test the first formula is to use financial analysis which is to calculate income then described

$$Pd = TR - TC$$

Information:

Pd: Organic Rice Farming Income TR: Total Reveneu (Total Revenue)

TC: Total Cost

To calculate the Total Reveneu (revenue), it can be calculated using the following formula:

$$TR = P \times Q$$

Information:

TR: Total acceptance of organic rice farming

P: Organic Rice Sales Price

Q: Number of Organic Rice Sales

Then the total cost can be calculated using the formula:

TC = FC + VC

Information:

TC: Total Cost FC: Fixed Cost VC: Variable Cost Meanwhile, from calculating income, it will be known the level of production of each farmer from organic rice farming. Then, to calculate the Break Event Point (BEP) or break even point where the income from the business is the same as the issued capital, no loss or profit occurs using the formula:

To find out the number of units produced (production) to reach the principal return point (break-even point) are:

$$BEP = \frac{FC}{P - VC}$$

If the unit price to look for to reach the main opportunity point (break-even point) is:

$$BEP = \frac{FC}{1 - VC/S}$$

If the amount of revenue to be sought to reach the main opportunity point (breakeven point)

is: $BEP = \frac{TC}{Production Total}$

Information:

P : Price per Unit
S : Reception
FC : Fix Cost
TC : Total Cost
VC : Variable Cost

BEP: Number of Units Produced

To test the formulation of the second problem is to use a Likert scale and give scores to the questionnaire and then interpreted in the form of narration. With a score of each indicator, namely:

Strongly Agree (SS) = 5 Agree (S) = 4 Disagree Less (KS) = 3 Disagree (TS) = 2 Strongly Disagree (STS) = 1

In order to get the results of interpretation then first calculate the highest score (maximum score), index score and score interval.

Interpretation of Calculation Score

In order to get the results of interpretation, we must first know the highest score (maximum), index score and score interval.

- 1. Calculating the Maximum Score
- 2. Maximum Score = Number of Respondents x Highest Likert Score x Number of Questions
- 3. Calculating the Score Index

Indeks Skor (%) $= \frac{\text{Total Score}}{\text{Maximal Skor}} \times 100$ 4. number of Likert scores $I = \frac{100}{\text{Number of likert score}}$

Tabel 1. Interval Skor Jawaban Likert ⁸

Indeks Skor	Information
0% - 19,99%	Very ineffective
20% - 39,99%	Ineffective
40% - 59,99%	Effective enough
60% - 79,99%	Effective
80% - 100%	Very Effective

To test whether the instruments used are measurable and accurate, the validity and reliability tests of the data are used using the SPSS program.

Validity Test is used to test how well an instrument is made to measure the particular concept you want to measure. The results of the validity of each questionnaire question can be seen in the magnitude of the numbers contained in the Corrected Item Total Correlation column. With the following basic decisions:

- 1. If r arithmetic is positive and r arithmetic> r table then the variable is valid. However, if r is positive and <r table, the item or variable is invalid.
- 2. If r arithmetic> r table but is negative then the item or variable is invalid.

Reliability Test is a measurement that shows the extent of the measurement without bias (error free) and therefore guarantees consistent measurements across time and across various items in the instrument. In the SPSS program, the method used in testing this reliability is to use alpha cronbach> 0,600.

Results And Discussion

Organic Rice Production Farm Area 0.443 Ha

Based on the table below it can be seen that the average sample of 20 farmers in total organic rice farming production is between 1-3 tons. Then those in 3.1-5 tons are 8 people and 2 others are in 5.1-7 tons.

Table 2. Total Distribution of Organic Rice Farm Production

Production	Amount (People)	Percentage (%)
1 - 3 ton	20	66
3,1 - 5 ton	8	27
5,1 - 7 ton	2	7
Total	30	100

Source: Primary Data Processed in 2019

Fixed Costs of Organic Rice Farming Area of 0.433 Ha

Fixed costs are costs that will be and continue to be spent even if the production has been spent a lot or a little. The fixed costs incurred by organic rice farmers per planting season are: hoe, sickle, machete, spray and land rent. The following is a description of the average fixed costs of organic rice farmers.

Table 3. Average Distribution of Fixed Costs of Organic Rice Farming Per Harvest Season

Description	Average	
Sewa Lahan	2.770.833/ year	
Semprotan	18.681	
Arit	6.847	
Parang	7.250	
Cangkul	5.396	
Average Total	2.809.007	

Source: Primary Data Processed in 2019

Variable Cost Land Area 0.443 Ha

Variable or variable costs are costs that are big or small are influenced by the production that has been obtained. Included in the variable costs of organic rice farmers are as follows:

Table 4. Average Variable Cost of Organic Rice Farming

	-	_	
No	Description	Amount	Total
1	Bibit	9,643 kg	93.367
2	Pupuk	1.147 kg	1.512.667
3	Tenaga Kerja	32 orang	2.558.317
Total A	Average Cost		4.164.351

Source: Primary Data Processed in 2019

Receipt of Organic Rice Farmers Area of 0.443 Ha

Revenue is the product of the price with total production or the formula commonly used $TR = Pq \times Q$, where TR = Total Reveneu and Pq is the price per unit unit and Q is the unit of production.

Table 5. Average Receipts of Organic Rice Farmers

No	Description	Average
1	Produksi (Kg)	2,650,83
2	Harga Jual (Rp)	5.930
Average Receipts		15.905.000

Source: Primary Data Processed in 2019

Organic Rice Farm Income Land Area 0.443 Ha

The income is the final peak of all the activities that the sample farmers go through or are usually called the profits they will get from doing organic rice farming. The following is the average income of organic rice farming farmers.

Table 6. Average Income of Organic Rice Farmers

No	Description	Amount (Rp)	Average
1	Total Penerimaan	477.150.000	15.905.000
2	Total Biaya	209.200.709	6.973.357
3	Total Pendapatan	267.949.291	8.931.643

Source: Primary Data Processed in 2019

Break Event Point (BEP) Land Area 0.443

To calculate the results of the BEP (Break-Even Point) calculated through the Production BEP, BEP Price and BEP acceptance.

Table 7. Average BEP of Production, Price and Revenue

No	Uraian	Rata-rata
1	BEP Produksi	
1		678 Kg
2	BEP Harga	Rp. 2.670
3	BEP Penerimaan	Rp. 3.808.610

Source: Primary Data Processed in 2019

On the BEP yield of 678 kg, this shows that organic rice farmers must sell production of 678 kg to break even. In the BEP results the price is Rp. 2,670, this shows that organic rice farmers must set a minimum production price in the amount of Rp.2,670 / kg in order to break even. For the results of BEP receipts of Rp. 3,808,610, in this case the farmer must obtain a turnover of Rp. 3,808,610 in order to break even.

Farmers' Perception of Organic Rice Farming

1. Mutu and Quality

To test the validity and reliability of the Mutu and Quality (A) benchmarks can be seen in table 8.

Table 8.Mutu and Quality Benchmarks and Reliability Tests (A)

Instrumon r Hitung	"Tobal	Cronbach Keterangan Uji			
Instrumen	r Hitung	r Tabel	Alpha'	Validitas	Reliabilitas
A1	0,657	0,4629		Valid	
A2	0,701	0,4629		Valid	
A3	0,604	0,4629	0,617	Valid	Reliabel
A4	0,391	0,3610		Valid	
A5	0,760	0,4629		Valid	

Source: Primary Data Processed in 2019

Discussion

For the distribution of answers from each question instrument with Mutu and Quality (A) benchmarks can be seen in Table 9.

Table 9. Distribution of Respondents' Answers to Benchmarks of Mutu and Quality (A)

Instrumen	SS	S	KS	TS	STS
A1	4	11	8	7	0
A2	3	15	9	3	0
A3	0	13	10	7	0
A4	0	16	11	3	0
A5	3	13	10	4	0

Source: Primary Data Processed in 2019

Interpretation of Calculation Score

Then, from all the answers to the instrument questions on the Mutu and Quality (A) respondents above, we can see the following answer score index:

1. Total Score = 514 2. Maximal Score = 7503. Score Index = $\frac{\text{Total Skor}}{\text{Skor Maksimal}} \times 100\%$ = $\frac{514}{750} \times 100\%$ = **68,53%**

From the above calculation it can be seen that a score index of 68.53% is found in the effective interval. So it was concluded that farmers' perceptions of organic rice farming in the study area can be said to be effective on Mutu and Quality (A) benchmarks.

2. Price

For the validity and reliability test of the Price (B) benchmark, see table 10.

Table 10. Tests of Validity and Reliability of Benchmarks (B)

-			C 1 1	TZ 4	тт
Instrumon	Instrument u III-lean	r Tabel	Cronbach	Keterai	ngan Uji
Instrumen	r Hitung	1 1 1 1 1 1 1 1	Alpha'	Validitas	Reliabilitas
B1	0,621	0,4629		Valid	
B2	0,523	0,4629		Valid	
В3	0,574	0,4629	0,613	Valid	Reliabel
B 4	0,681	0,4629		Valid	
B5	0,724	0,4629		Valid	

Source: Primary Data Processed in 2019

Discussion

For the distribution of answers to each question instrument with Price (B) benchmarks can be seen in Table 11.

Table 11. Distribution of Respondents' Answers to Benchmarking of Prices (B)

Instrumen	SS	S	KS	TS	STS
B1	12	13	5	0	0
B2	12	15	3	0	0
В3	10	14	4	2	0
B4	12	12	4	2	0
B5	10	12	5	3	0

Source: Primary Data Processed in 2019

Interpretation of Calculation Score

Of all the answers to the question instruments in the perception of farmers in applying organic rice to the Selling Price (B) benchmark, it can be seen that the index of answers obtained is:

1. Total Score = 617
2. Maximal Score = 750
3. Score Index =
$$\frac{\text{Total Score}}{\text{Maximal Score}} \times 100\%$$

= $\frac{617}{750} \times 100\%$
= **82.26%**

From the above calculation it can be seen that an index score of 82.26% is found at very effective intervals. So it was concluded that farmers' perceptions of organic rice farming in the study area can be said to be very effective in Price (B) benchmarks.

3. Marketing

To test the validity and reliability of the Marketing (C) benchmarks can be seen in table 12. Table 12. Marketing Benchmark Validity and Reliability Test (C)

Instrumen	# I Litum a	"Tobal	Cronbach	Keterai	ngan Uji
Instrumen	r Hitung	r Tabel	Alpha'	Validitas	Reliabilitas
C1	0,649	0,4629		Valid	
C2	0,621	0,4629		Valid	
C3	0,557	0,4629	0,613	Valid	Reliabel
C4	0,616	0,4629		Valid	
C5	0,716	0,4629		Valid	

Source: Primary Data Processed in 2019

Discussion

For the distribution of answers to each question instrument with Marketing (B) benchmarks can be seen in Table 13.

Table 13. Distribution of Respondents' Answers to Benchmarking of Marketing (B)

Instrumen	SS	S	KS	TS	STS
C1	6	5	8	10	0
C2	8	17	4	1	0
C3	9	14	7	0	0
C4	6	14	8	2	0
C5	5	10	8	7	0

Source: Primary Data Processed in 2019

Interpretation of Calculation Score

Of all the answers to the question instruments in the perception of farmers in applying organic rice to the marketing benchmark (C), it can be seen that the index of answers obtained is:

1. Total Score =
$$556$$

2. Maximal Score = 750
3. Score Index = $\frac{\text{Total Score}}{\text{Maximal Score}} \times 100\%$
= $\frac{556}{750} \times 100\%$
= **74,13%**

From the above calculation it can be seen that a score index of 74.13% is found in the effective interval. So it was concluded that farmers' perceptions of organic rice farming in the study area can be said to be effective in marketing (C) benchmarks.

4. Environmentally Friendly

To test the validity and reliability of the Green benchmark (D) can be seen in table 14.

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Lastanasa		"Tobal	Cronbach	Keterangan Uji	
Instrumen	r Hitung	r Tabel	Alpha'	Validitas	Reliabilitas
D1	0,489	0,4629		Valid	_
D2	0,660	0,4629		Valid	
D3	0,603	0,4629	0,608	Valid	Reliabel
D4	0,604	0,4629		Valid	
D5	0,761	0,4629		Valid	

Source: Primary Data Processed in 2019

Discussion

For the distribution of answers to each question instrument with Green benchmarks seen in Table 15

Table 15. Distribution of Respondents' Answers to Environmental Friendly Benchmarks (D)

Instrumen	SS	S	KS	TS	STS
D1	15	13	2	0	0
D2	11	16	3	0	0
D3	12	16	2	0	0
D4	7	17	5	1	0
D5	10	15	5	0	0

Source: Primary Data Processed in 2019

Interpretation of Calculation Score

Of all the answers to the instrument questions in the perception of farmers in applying organic rice to the Green Benchmarks (D) it can be seen that the index of answers obtained is:

1. Total Score = 636
2. Maximal Score =
$$\frac{750}{\text{Maximal Score}} \times 100\%$$

= $\frac{\frac{636}{750} \times 100\%}{\text{Maximal Score}} \times 100\%$
= **84,8%**

From the above calculation it can be seen that an index score of 84.8% is found at very effective intervals. So it can be concluded that farmers' perceptions of organic rice farming in the study area can be said to be very effective on the Environmental Friendly benchmark (D).

5. Production Costs

To test the validity and reliability of the Production Cost (E) benchmarks can be seen in table 16.

Table 16. Test the Validity and Reliability of Benchmarks in Production Costs (D)

Instrumen	Instrumen r Hitung		Cronbach	Keterangan Uji	
Instrumen	r Hitung	r Tabel	Alpha'	Validitas	Reliabilitas
E1	0,690	0,4629		Valid	
E2	0,461	0,3610		Valid	
E3	0,579	0,4629	0,604	Valid	Reliabel
E4	0,772	0,4629		Valid	
E5	0,499	0,4629		Valid	
E6	0,400	0,3610		Valid	

Source: Primary Data Processed in 2019

Discussion

For the distribution of answers to each question instrument with a Production Cost benchmark seen in Table 17.

Table 17. Distribution of Respondents' Answers to Measuring Production Costs (E)

Instrumen	SS	S	KS	TS	STS
E1	7	16	5	2	0
E2	9	15	6	0	0
E3	9	13	8	0	0
E4	6	14	6	3	1
E5	9	16	5	0	0
E6	8	18	4	0	0

Source: Primary Data Processed in 2019

Interpretation of Calculation Score

From all the responses of farmers' perception instruments in applying organic rice to the Production Cost (E) benchmark, it can be seen that the answer score index obtained is:

1. Total Score = 721 2. Maximal Score = 900 3. Score Index = $\frac{\text{Total Skor}}{\text{Skor Maksimal}} \times 100\%$ = $\frac{721}{900} \times 100\%$ = **80.11%**

From the above calculation it can be seen that an index score of 80.11% is found at very effective intervals. So it can be concluded that farmers' perceptions of organic rice farming in the study area can be said to be very effective in measuring the Production Costs (E).

Based on the 5 variables above that have been described one by one and carefully in accordance with the phenomenon in the field, the researcher will explain the conclusions from the whole. The following is an index table of the 5 variables that have been stated.

Table 18. Overall Distribution of Score Index Calculations

No.	Variable Name	Score	
		Index	
1	Mutu dan Kualitas	68,5	
2	Harga	82,26	
3	Pemasaran	74,13	
4	Ramah Lingkungan	84,8	
5	Biaya Produksi	80,11	
Rataan		77,968	

Source: Primary Data Processed in 2019

The highest score index occurs in the Environmentally Friendly benchmark (84.8%), farmers as respondents are aware that organically growing rice farming can help maintain environmental setbacks. Farmers are aware of the dangers of chemicals that continue to be used and will damage the natural ecosystem slowly, especially on soil fertility. Organic farmers set the principle of independence and prevent pests instead of immediately eradicating. The independence in question is more creative by utilizing the natural surroundings integrated between livestock, plants and humans.

Furthermore, in the position of the second highest score index is Price (82.6%). Price has an important role in every business. Organic rice farmers as respondents were affected by the high selling price determined at Rp. 6,000 / kg of wet rice. This price range is quite far with the market price of conventional rice farming, between Rp. 4000-4,500 only. Prices on organic rice are in accordance with facts on the ground based on respondents' perceptions, not active and not affected by different harvest days. Prices will remain the same, in contrast to the selling prices that normally occur in conventional rice, prices tend to fluctuate and do not get guaranteed price certainty.

Then on the decline in Production Costs also has a very effective perception of farmers so that they apply organic farming (80.11%). Low production costs are of concern to farmers, in their cultivation they only use three types of organic fertilizers, namely: Liquid Organic Fertilizer (POC), Manure and Vegetable Pesticides. These three fertilizers can be made independently by utilizing the natural surroundings or bought at relatively affordable prices. The use of labor and labor days is also not needed in large numbers. Meanwhile the Government is taking a role in assisting farmers, which is increasingly motivating farmers to continue organic rice farming. 10 head of cattle, jet engines, transportation, fertilizer fermentation, grass chopper machines for cattle feed are given to fertile farmer groups to be cared for and used as best as possible in conducting their farming.

In marketing, the respondent farmers sell their unhusked rice to agents who at all times collect their crops. Farmers feel safe when the marketing flow of their crops is clear. See, not many people cultivate rice farming organically. This can convince farmers to implement organic rice farming. And farmers also hope that the perpetrators of marketing rice (wet rice) continue to support this farming in order to develop even wider. When viewed from the marketing of rice is also booming. As for marketing organic rice, it is distributed to grocery stores, supermarkets, souvenir centers in Kuala Namu, and other people's orders. The price of organic white rice per kg reaches Rp. 14,000, while for black and red Rp. 20,000 / kg.

And the last is Mutu and Quality with the acquisition of a score index of 68.53%. Farmers realize that planting organically can help people to consume healthy and quality products. Then, make the public aware of the importance of quality and quality for the body in addition to prioritizing the input generated in the farm, namely health insurance. In addition, farmers assume that organically grown rice has pest-resistant quality and is not susceptible to disease. But despite all that, farmers also feel worried about the future of

organic rice. Because, the main consumers of organic rice are the middle class and above and the influence of the level of education is also very clear in knowing the benefits of consuming organic products. They worry about the need for consumption of organic rice which will continue to decline and rice farmers will return to other farming.

Conclusions

- 1. Organic rice farmers as respondents in Lubuk Bayas Village, Perbaungan Serdang Bedagai Subdistrict received a total income of Rp.477,150,000 / season with an average of Rp.15,905,000 / person. Meanwhile the total production costs incurred reached Rp.209,200,708 and an average of Rp. 6,973,357. And the total income of organic rice farmers per season is Rp. 267,949,291 with an average of Rp. 8,931,643 / person. For BEP Production results obtained an average of 678 kg, BEP Price of Rp. 2,670 while the BEP Receipt was Rp. 3,808,610.
- 2. Farmers have very effective perceptions on Price (82.26%), Environmentally Friendly (84.8%) and Production Costs (80.11%) benchmarks. While Marketing (74.13%), Quality and Quality (68.53%) are included in the effective category of organic rice farming.

Suggestion

Based on the conclusion of the results that have been described, suggestions that can be taken are:

- 1. To increase the level of application of organic rice farmers in Lubuk Bayas Village, it is necessary to have an intensive approach between farmers and farmers, the government and extension workers to change their perception to switch to organic rice farming in order to continue developing.
- 2. The next researcher is expected to study the strategy of developing organic rice so that farmers know how to stay afloat and apply organic rice farming while also measuring the extent to which the effectiveness of the performance of farmer groups to their members.

References

Andoko, A. 2008. Budidaya Padi Secara Organik. Jakarta: Penebar Swadaya.

Badan Pusat Statistik, 2015. Serdang Bedagai dalam Angka. Sumut.

Nazir, M. 2003. Metode Penelitian. Bogor: Ghalia Indonesia.

Novita. D. 2009. Dampak Investasi Sektor Pertanian Terhadap Perekonomian Sumatera Utara. Tesis. Universitas Sumatera Utara.

Purwasasmita, Mubiar. 2012. Padi SRI Organik Indonesia. Penerbit :Penebar Swadaya Peraturan Menteri Pertanian Repubik Indonesia Nomor 64/Permentan/OT.140/5 tahun 2013. Tentang Sistem Pertanian Organik.

Sutanto, R. 2002. Penerapan Pertanian Organik. Penerbit : Kanisius. Yogyakarta.

Siregar, Gustina dan Choirunnisa. 2018. Perbandingan Pendapatan Kelompok Tani Padi Dengan Non Kelompok Tani Padi di Kelurahan Terjun, Kecamatan Medan Marelan.