



Analysis Income Business Farmers Paddy Ricefield Organic in Pasar Terusan Village Muara Bulian District Regency Batang Hari Jambi Province

Bangun Joko Laksono^{1*}, Reno Armando², Ratna Dewi³, Uliya⁴

Graha Karya University Estuary Bulian

Corresponding Author: Bangun Joko Laksono masjokolaksono@gmail.com

ARTICLE INFO

Keywords: Analysis, Income, Organic Paddy Rice

Received : 12 August

Revised : 17 September

Accepted: 20 October

©2023 Laksono, Armando, Dewi, Uliya:

This is an open-access article distributed under the terms of the [Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

This study aims to determine the income of organic rice farming. This research was conducted in Pasar Juruan Village, Muara Bulian District, Batang Regency Day by using primary and secondary data. Sampling in this study was conducted by accidental sampling method with 40 farmers as respondents. The variables measured in this study are production, land area, number of workers, number of seeds, number of organic pesticides and organic fertilizer. Based on the results of the study, it can be concluded that the overall acceptance of organic wetland rice farming farmers in the village market canal in the district of Muara Bulian Batang Batang district amounted to Rp 281,275,000, with a total production cost of organic wetland rice farming farmers amounting to IDR 59,826,630. The income of the sample farmers in organic rice farming in the study area is Rp. 221,448,370 and an average of Rp. 5,536,209 with an R / C ratio of 4.7, then organic rice farming is feasible to be cultivated

INTRODUCTION

Agriculture is one of the primary sectors that supports the Indonesian economy. In this era of globalization, the agricultural sector plays an important role in the national economic sector because it turns out that the agricultural sector is more resistant to economic crises compared to other sectors. Apart from that, the agricultural sector plays a role in meeting the needs of the population, increasing farmers' income, providing industrial raw materials, providing business and employment opportunities and upholding national food security (Adiwilaga, 2007).

Law no. 7 of 1996 concerning food mandates that the government and society are obliged to realize food security. Food security is a condition where household food is met, which is reflected in the availability of sufficient food, both in quantity and quality, safe, equitable and affordable. One of the government's efforts to achieve food security is implemented through government regulation (PP) no. 68 of 2002 concerning food security which states that food provision is organized to meet the main food consumption needs of the community, even though there is other food consumption, these food needs continue to grow from time to time, especially as population continues to increase so that food demand will increase every year.

One of the agricultural commodities that people really need is rice. Rice is a commodity that produces rice which is the main food crop for the Indonesian population. Several important reasons need to be increased in sustainable rice production, namely that rice is a staple food for Indonesian people, rice farming is part of the life of Indonesian farmers so that it can create employment opportunities and household income for farmers (Hamdan, 2013)

LITERATURE REVIEW

Draft Farming

Farming is a human business activity to cultivate land with the aim of obtaining plant or animal products without reducing the ability of the land concerned to obtain further results (Adiwilaga, 1992). Meanwhile, according to Soekartawi (2005), agricultural science is an applied science that discusses or studies how to use resources efficiently and effectively in an agricultural business in order to obtain maximum results. It is said to be effective if farmers or producers can allocate the resources they have (which they control) as well as possible and it is said to be efficient if the use of these resources produces output that exceeds input.

According to Suratiyah (2008), farming can be grouped based on style, nature, organization, pattern and type of farming. Based on its style and nature, farming can be seen as subsistence farming and commercial farming. Commercial farming is a farming business that uses its entire harvest commercially and pays attention to the quality and quantity of the product, while subsistence farming only uses the harvest from its farming activities to meet the needs of the farmer or his own family.

Based on its organization, farming is divided into three, namely individual business, collective business and cooperative business.

Business Individual

Individual business is a farming activity in which the entire farming process is carried out by the farmer himself and his family, starting from planning, cultivating the land to marketing, so that the production factors used in farming activities can be determined by themselves and owned individually (individually).

- a. Business collective
- b. Collective business is a farming activity in which the entire production process is carried out jointly by a group and then the results are shared.
- c. Business cooperative

A cooperative business is a farming business in which each production process is carried out individually, only a few activities that are considered important are carried out by the group, for example purchasing inputs, eradicating pests, marketing the results and building channels.

Farming based on its pattern, farming consists of three types of patterns, namely special, non-special and mixed patterns. Pola farming special

A special farming pattern is a farming that only operates one branch of farming. Based on its organization, farming is divided into three, namely individual business, collective business and cooperative business. Business individual. Business individual is activity farming which all over process

- d. Business collective

Collective business is a farming activity in which the entire production process is carried out jointly by a group and then the results are shared

Business Cooperative

Business cooperative is business farmer which each process the production done in a way individual, only on a number of activity which considered it is important that this is done by the group, for example purchasing inputs, eradication pest, marketing results and making channel.

Farming based on its pattern, farming consists of three types of patterns, that is pattern special, No special, and mixture.

- e. Pattern farming special

A special farming pattern is a farming that only cultivates one branch farming.

Based on its organization, farming is divided into three, namely business individual, business collective and business cooperative.

- f. Business individual

Business individual is activity farming Which all over process his farming business done by farmer Alone along with his family start from planning, cultivating the land to marketing, so that the production factors are used in farming activities can be determined independently and owned individually individual (Individual).

- g. Business collective

Business collective is activity farming which all over process the production done together by a group then the result shared. Business cooperative is business farmer which each process the production done in a way individual, only on a number of activity which considered It is important that this is done by

the group, for example purchasing inputs, eradication pest, marketing results and making channel.

Farming based on its pattern, farming consists of three types of patterns, that is pattern special, No special, and mixture.

h. Pattern farming special

A special farming pattern is a farming that only cultivates one branch farming.

i. Pattern farming No special

The farming pattern is not specifically a commercial farming business a number of branch business together but with limit which firm.

j. Pattern farming mixture

The mixed farming pattern is a commercial farming business several branches together in a plot of land without boundaries firm.

Farming based on the type of farming or agricultural business is grouping farming based on type commodity agriculture Which endeavor, for example farming plant food, plantation, horticulture, fishery, farm, And forestry.

Farming Paddy Ricefield Organic

Agriculture organic is activity match plant which familiar with the environment. Organic farming seeks to minimize negative impacts for the natural environment. The main characteristic of organic farming is the use of local varieties which is relatively unspoiled followed by the use of organic fertilizers and pesticides organic. By because cultivated without use fertilizer chemistry and chemical pesticides so that these organic agricultural products are free from substance residues dangerous (Andoko, 2010).

Department agriculture has compile standard agriculture organic in Indonesia, stated in SNI 01-6729-2002 and has revised become SNI 6729-2010. The organic farming system adheres to the concept of organic processes, meaning all process system agriculture organic started from setup land until finished.

k. Pattern farming No special

The farming pattern is not specifically a commercial farming business Agriculture organic is activity match plant which familiar with the environment. Organic farming seeks to minimize negative impacts for the natural environment. The main characteristic of organic farming is the use of local varieties which is relatively unspoiled followed by the use of organic fertilizers and pesticides organic. By because cultivated without use fertilizer chemistry and chemical pesticides so that these organic agricultural products are free from substance residues dangerous (Andoko, 2010).

Department agriculture has compile standard agriculture organic in Indonesia, stated in SNI 01-6729-2002 and has revised become SNI 6729-2010. The organic farming system adheres to the concept of organic processes, meaning all process system agriculture organic started from setup land until

Rice plants can grow well in areas with hot climates and contains a lot of water vapor with an average rainfall of 200 mm/month Moreover, with distribution over 4 months, the desired rainfall is approx 1500-2000 mm/year with altitudes ranging from 0 - 1500 above sea level and Good soil for the growth of rice plants is paddy soil with content of sand, dust and clay fractions in a

certain ratio and Water is required in sufficient quantities so that the thickness of the top layer is approx 18 – 22 cm with PH 4 – 7 (Dody et al ., 2007).

Rice Cultivation Ricefield Organic

Method planting paddy organic on basically No different with conventional (non-organic) rice cultivation (Andoko, 2010). Difference for organic rice farming and can lie in the inputs used in Organic rice farming uses natural products as fertilizer and pesticides naturally, thus producing natural, healthy and friendly output. Giving fertilizer organic form fertilizer straw paddy give profit to fertility land. Condition irrigation Which No always flooded will provide a favorable aerobic environment, soil microorganisms and growth as well development rooting plant (Suardi, 2002). Technique cultivation paddy organic with method: preparation seed, seed before sowing tested in a salt solution. A salt water solution is sufficient for testing the seeds is solution which if the seed floating means the seeds are not good for planting, while those that sink are good seeds for planted. Then the seeds have been tested soaked in plain water for 24 hours then drained and brooded 2 day, then sown on media land and organic fertilizer (1:1) in a rectangular container measuring 20 × 20 cm for 7 day. At the age of 7 – 10 days the rice seeds are ready to be planted. Soil cultivation, for plant paddy i.e. done for get structure better land for plants, avoiding weeds. Processing is carried out two weeks before plant using a hand tractor, until a mud structure is formed. Surface land flattened for make it easier control and control water (Andoko, 2005).

Not all rice varieties are suitable for organic cultivation. Variety the only types of rice that are suitable for growing organically are non-hybrid varieties or varieties experience. So that producing optimal, type paddy This No demand use fertilizer chemistry (Andoko, 2010). Fertilization treatment, fertilizer application is directed towards improvement soil health and the addition of reduced nutrients after this has been done harvesting. Providing organic fertilizer is carried out at the soil processing stage second so that fertilizer Can merges with land (Andoko, 2005). Need organic fertilizer of 15 – 20 tons per hectare. Soil conditions improve then organic fertilizer can be reduced according to needs (Sutanto, 2002). The organic fertilizer that is often used to fertilize plants is compost.

And organic fertilizer (1:1) in a rectangular container measuring 20 × 20 cm for 7 day. At the age of 7 – 10 days the rice seeds are ready to be planted. Soil cultivation, for plant paddy i.e. done for get structure better land for plants, avoiding weeds. Processing is carried out two weeks before plant using a hand tractor, until a mud structure is formed. Surface land flattened for make it easier control and control water (Andoko, 2005).

Not all rice varieties are suitable for organic cultivation. Variety the only types of rice that are suitable for growing organically are non-hybrid varieties or varieties experience. So that producing optimal, type paddy This No demand use fertilizer chemistry (Andoko, 2010).

Fertilization treatment, fertilizer application is directed towards improvement soil health and the addition of reduced nutrients after this has been done harvesting. Providing organic fertilizer is carried out at the soil processing

stage second so that fertilizer can merge with land (Andoko, 2005). Need organic fertilizer of 15 – 20 tons per hectare. Soil conditions improve then organic fertilizer can be reduced according to needs (Sutanto, 2002). The organic fertilizer that is often used to fertilize plants is compost. Compost is an organic fertilizer derived from plant, animal and waste residues waste organic which has undergone process decomposition (Parnata, 2010).

Maintenance, organic rice planting systems do not require flooding water keep going continuous, enough with soil conditions which wet. Inundation done only for make it easier maintenance. On practice management water on system paddy organic can done as following: on aged 1 – 10 HST, rice plants are flooded with an average water level of 1 cm, then on age 10 day done weeding. After done weeding plant No flooded. Treatment Which Still need weeding next, so two day approaching weeding plant in puddle. On moment plant flowering, plant flooded and after paddy ripe milk plants do not flooded return until harvest (Andoko, 2005).

Control of pests and diseases of organic rice plants can be done by: (1) mechanical control is carried out by catching pests directly or using traps; (2) cultural control Technically, this is done by planting host plants around the rice fields organic; (3) control use pesticide organic Which can controlling pests such as grasshoppers, stem borers, brown planthoppers, and green planthopper (Sriyanto, 2010). Preventing pests and diseases is done by use pesticide experience, like onion red, onion white, chilli red, tobacco, turmeric, sere, soursop (Andoko, 2005).

Production and Factor Production

Production can interpreted as activity in create And increasing the usefulness (utility) of goods and services (Assauri, 2006). Production Technically agriculture uses input and output. Input is all included in the production process, such as land used, power Work And his family, as well as every worker Which paid, activity mentality, planning and management, both crops and animal feed, fertilizers, vegetable insecticides and agricultural tools. Output is the yield of plants and livestock generated by farming. (Soetrisno, et al. 2003).

Factors of production are objects or service provided by nature or generated by man and used for produce various type goods or service. Factor – factor production Which general used in agriculture include land, seeds, fertilizer, pesticides, energy work, and so on (Muhananto et al , 2009). Production factors will determine big small production which produced (Suzana et a l, 2011).

Function production will works when there is a number of factor which influence output production. In farming paddy organic, there is a number of factor which can influence production ie as following:

1. Land

Land is a determinant of the influence of production factors in the sector agriculture. The larger the area of land used in farming, the more the large amount of production produced by this land (Mufriantie and Anton, 2014). Land is factor production main. Land agriculture Lots defined as land prepared for farming, for example ricefield, tegal, yard (Muhananto et Al , 2009).

Good land for organic rice cultivation is at high altitude The location ranges from 0 - 1500 meters above sea level and the soil is good for growth Organic rice plants are rice fields containing fractions of sand, dust, And clay in a certain ratio and water is needed in amount sufficient and the thickness of the top layer is around 18 - 22 cm with a Ph of 4 - 7 (Dody et al., 2007).

2. Factors

Factor of production are objects or service provided by nature or generated by man and used For produce various type goods or service. Factor - factor production which general used in agriculture include land, seeds, fertilizer, pesticides, energy work, and so on (Muhananto et al, 2009). Production factors will determine big small production which produced (Suzana eta l, 2011).

3. Power Work

In economics, what is meant by labor is something tools of physical strength and the human brain, which cannot be separated from humans and aimed at production businesses (Daniel. 2002). Labor is important factor in family farming. Generally farming households Very limited ability is determined in terms of capital and role family workforce. If it can still be completed by outside workers means save cost (Suratiah, 2006).

The standard working day for an adult male is to work full time in a day for 8 (eight) hours, so the workforce comes from a person's gender and rank refer to standard male equality or male equivalent working day (hksp) for adult women is equal to 0.7 HKSP, male children and female children are equal to 0.5 HKSP (Hernanto, 1996).

4. Seed

Seeds determine the superiority of a commodity. Superior seeds tend to produce products of good quality. Getting superior agricultural commodity seeds, the higher agricultural production will be achieved. So selecting superior seeds determines production results with good quality Good And guaranteed (Suzana et al., 2011). In farming in a way organic required seed which has certified organic, which has confirmed by institution that is Institution Certification Organic (LSO).

5. Fertilizer Organic

Giving fertilizer with composition which appropriate can produce product quality (Muzdalifah, 2011). On farming paddy in a way organic, organic fertilizer is needed in the cultivation process. Organic fertilizer is fertilizer Which originate from decomposition parts or remainder plant And animals, for example manure, green manure, compost, oil cake, guano, etc flour bone (Suardi, 2002).

6. Pesticide Organic

Plants really need pesticides to prevent and eradicate them pests and diseases that attack it. Organic pesticide ingredients friendly environment among them onion red, onion white, chilli red, tobacco, turmeric, sere, soursop (Andoko, 2005).

7. Technology

Technology hold role important in development potency resource crops especially paddy rice. According to Prayitno in Ilyas (2001), technology is an absolute requirement for development agriculture for makes it easier man in manage resource natural, so that reach results which maximum to use increase well-being man.

Cost Production

Cost production is all expenditure which must issued producers to obtain production factors and supporting factors other Which can powered use aagar production certain Which has planned can materialized with Good (Mahekam and Malcolm, 1991).

Cost production is mark sacrifice from various input in in the form of objects or services used during the production process whereas cost farming according to Hernanto (1993), can classified become:

Cost Still (Fixed Cost)

Costs that are not used up within one production period. Cost this between other: tax land, shrinkage tool there is building agriculture, maintenance pump water, and etc.

Aged 1 - 10 HST, rice plants are flooded with an average water level of 1 cm, then on age 10 day done weeding. After done weeding plant No flooded. Treatment Which Still need weeding next, so two day approaching weeding plant in puddle. On moment plant flowering, plant flooded and after paddy ripe milk plants do not flooded return until harvest (Andoko, 2005).

Control of pests and diseases of organic rice plants can be done by: (1) mechanical control is carried out by catching pests directly or using traps; (2) cultural control Technically, this is done by planting host plants around the rice fields organic; (3) control use pesticide organic Which can controlling pests such as grasshoppers, stem borers, brown planthoppers, and green planthopper (Sriyanto, 2010). Preventing pests and diseases is done by use pesticide experience, like onion red, onion white, chilli red, tobacco, turmeric, sere, soursop (Andoko, 2005).

Production and Factor Production

Production can interpreted as activity in create and increasing the usefulness (utility) of goods and services (Assauri, 2006). Production Technically agriculture uses input and output. Input is all included in the production process, such as land used, power Work And his family, as well as every worker Which paid, activity mentality, planning and management, both crops and animal feed, fertilizers, vegetable insecticides and agricultural tools. Output is the yield of plants and livestock generated by farming. (Soetrisno, et al. 2003).

Factors of production are objects or service provided by nature or generated by man and used For produce various type goods or service. Factor - factor production Which general used in agriculture include land, seeds, fertilizer, pesticides, energy work, and so on (Muhananto et al , 2009). Production factors will determine big small production which produced (Suzana et a l, 2011). Function production will works when there is a number of factor which influence output production. In farming paddy organic, there is a number of factor which can influence production ie as following:

1) Land

Land is a determinant of the influence of production factors in the sector agriculture. The larger the area of land used in farming, the more the large amount of production produced by this land (Mufriantje and Anton, 2014). Land is factor production main. Land agriculture Lots defined as land prepared for farming, for example ricefield, tegal, yard (Muhananto et Al, 2009). Good land for organic rice cultivation is at high altitude The location ranges from 0 – 1500 meters above sea level and the soil is good for growth Organic rice plants are rice fields containing fractions of sand, dust, And clay in a certain ratio and water is needed in amount sufficient and the thickness of the top layer is around 18 – 22 cm with a Ph of 4 – 7 (Dody et al., 2007).

2) Seeds determine the superiority of a commodity

Superior seeds tend to produce products of good quality. Getting superior agricultural commodity seeds, the higher agricultural production will be achieved. So selecting superior seeds determines production results with good quality Good And guaranteed (Suzana et al., 2011). In farming in a way organic required seed which has certified organic, which has confirmed by institution that is Institution Certification Organic (LSO).

3) Fertilizer Organic

Giving fertilizer with composition which appropriate can produce product quality (Muzdalifah, 2011). On farming paddy in a way organic, organic fertilizer is needed in the cultivation process. Organic fertilizer is fertilizer Which originate from decomposition parts or remainder plant And animals, for example manure, green manure, compost, oil cake, guano, etc flour bone (Suardi, 2002).

4) Pesticide Organic

Plants really need pesticides to prevent and eradicate them pests and diseases that attack it. Organic pesticide ingredients friendly environment among them onion red, onion white, chilli red, tobacco, turmeric, sere, soursop (Andoko, 2005).

5) Technology

Technology hold role important in development potency resource crops especially paddy rice. According to Prayitno in Ilyas (2001), technology is an absolute requirement for development agriculture for makes it easier man in manage resource natural, so that reach results which maximum to use increase well-being man.

Cost Production

Cost production is all expenditure which must issued producers to obtain production factors and supporting factors other which can powered use agaar production certain which has planned can materialized with Good (Mahekam and Malcolm, 1991).

Cost production is mark sacrifice from various input in in the form of objects or services used during the production process whereas cost farming according to Hernanto (1993), can classified become:

- Cost Still (Fixed Cost)

Costs that are not used up within one production period. Cost This between other: tax land, shrinkage tool there is building agriculture, maintenance pump water, And etc.

- Cost Variable (Variable Cost)

Cost which big or small depends on cost scale production and these costs are costs for organic fertilizer, superior seeds, vegetable pesticides, wages power Work, cost harvest, cost processing land and rent land.

- Cost Which paid/fee cash

Costs incurred for inputs required to produce output and consists of costs for buy fertilizer, purchase drugs (pesticides), purchasing seeds, purchasing animal feed, taxes, labor wages outside, And etc.

- Cost Which No paid/fees not paid cash

Unpaid costs/non-cash costs consist of from use family labor, interest owner's equity, capital depreciation, harvest costs, And processing land from family, And etc.

- Cost direct

Cost which direct used in process production, consists from expenses for purchasing fertilizer, organic pesticides, superior seeds, taxes, wages power Work outside, food livestock, food power outdoor work, And etc.

- Cost No direct

Cost Which No direct used in process production ie shrinkage capital still And etc. Whole cost issued For Production process activities are called total costs. Total cost is the result the sum of fixed costs and variable costs. Fixed costs are all costs which issued for obtain factors production which its nature still for example buy land, establish building And machines. Whereas Variable cost is cost which issued for obtain factors production of a permanent nature, for example buying land, building buildings and so on machines. Whereas variable cost is cost which issued For Production activities change according to changes in the quantity of goods or services generated. Total cost can calculated with formula (Suratiah, 2015):

$$T.C = TFC + TVC$$

Where:

T.C: Total cost / total cost (Rp/yr)

TFC: Cost still / total fixed cost (Rp/yr)

TVC: Total cost variable / total variable cost (Rp/yr)

Reception and Income Farming

Suratiah (2009), say reception farming is all over Income obtained from farming during one period is taken into account from sales results And assessment return (Rp).

For know number of receipts obtained can be is known with formula:

$$TR = PQ$$

Information:

TR: Total receipts / total revenue (Rp) P: Price sell (Rp)

Q: Amount production (Kg)

On generally income can differentiated above:

Some of these factors can still be changed within the limits of ability farmer or No can changed the same very.

Analysis income have utility for farmer nor for owner of factors of production. There are two main objectives of income analysis, viz describe circumstances Now something activity farming and describes the future state of planning or action. Analysis income provide assistance for measure success from business which done.

Analysis R/C Ratio

The revenue to cost ratio (R/C ratio) shows how much it is reception which will obtained from every rupiah which issued in production business. With say other analysis ratio on cost production can used to measure the relative level of profit of business activities. It means from the revenue to cost ratio figure, it can be seen whether the business is operating the profitable or no (Harmono and Andoko, 2005).

Soekartawi (1995) stated that R/C or Revenue Cost Ratio is the comparison (ratio) between revenue and costs is written mathematically as following:

$R/C \text{ Ratio} = \frac{\text{Total Reception}}{\text{Total Cost}}$

Namely R = Total revenue (Rp) C = Cost total (Rp)

R/C Ratio shows the comparison between total revenue and costs

METHODOLOGY

Room Scope Study

This research was carried out in Pasar Juruan Village Muara Bulian District, Batanghari Regency. This location was chosen deliberately (Purposive), with consideration that Village Market Canal Subdistrict estuary Bulian Regency Batanghari own level production paddy highest compared to other villages in Muara Bulian District and only in Village Market Canal there is farmer which endeavor paddy organic.

Source and Method Taking Data

1. Data Primary

Primary data in this research was obtained directly from the object observed research. The method used in collecting data is survey method with interview techniques to rice farming actors organic based on a questionnaire containing questions about farming paddy ricefield in Village Market Canal Subdistrict estuary Bulian Regency Batanghari.

2. Data Secondary

Data secondary is something data Which obtained in a way No directly through literature study, namely by reading literature such as books literature, magazines, journals, book Which associated with principal study or various information from agencies Which related study This.

Technique Taking Sample

This research was carried out in Muara Bulian District, namely Village Market Canal Which agriculture paddy his rice fields is agriculture paddy ricefield organic which consists of 3 farmer groups with a population of 445

farmer. Sampling in this research was approached using the Accidental method sampling. The number of samples in this study was determined using formula from Taro Yamane or Slovin (Riduwan, 2007) as following:

$$n = \frac{N}{1 + N(e)^2}$$

Information:

- n : Amount Sample
- N : Amount Population
- e : Precision (15%)

$$n = \frac{N}{1 + N(e)^2} = 40 \text{ respondents}$$

So that based on results calculation on researcher take sample of 40 people. Based on the formula above, the sample size is obtained For each village is as following:

- For farmer groups source sustenance Which endeavor paddy fields organic is as following :

$$n_1 = \frac{175}{N} \times n = \frac{175}{445} \times 40 = 15.73 \text{ (rounded become 16)}$$

- For group farmer payo dry 1 Which endeavor paddy ricefield organic is as following:

$$n_2 = \frac{87}{N} \times n = \frac{87}{445} \times 40 = 7.82 \text{ (rounded become 8)}$$

- For group farmer payo dry 2 Which endeavor paddy ricefield organic is as following :

$$n_3 = \frac{183}{N} \times n = \frac{183}{445} \times 40 = 16.45 \text{ (rounded become 16)}$$

Population of organic lowland rice farmers in Pasar Juruan Village, District estuary Bulian seen on Table 6.

Table 1. Population of Organic Lowland Rice Farmers in Pasar Juruan Village Subdistrict Estuary Bulian

No	Group Farmer	Amount Population	Amount Sample
1.	Source Sustenance	175 Farmers	16
2.	Dry Payo 1	87 Farmer	8
3.	Dry Payo 2	183 Farmers	16
	Amount	445 Farmers	40 Farmer

Source: Data Monograph Village Market Canal 2018

Method Colection Data

Data which collected in study this is data primary and secondary. Primary data was obtained directly from sample farmers via interview Which guided with list question (Questionnaire) Which has prepared, whereas data secondary obtained with do study literature from reports from related agencies/institutions, literature, journals and results researcher previously.

Analysis Method Data

The data obtained is tabulated, taking the average value for each each component which calculated, then analyzed in a way descriptive. Analysis descriptive, namely describing the allocation of farming activities in farming paddy ricefield in One time process production. Analysis done with identify the variables that have been formulated, where is the data which has collected interpreted, for know income farming the. As for method analysis that used, that is:

Analysis Cost

Cost total is whole amount cost production which issued. This cost is obtained from adding up fixed costs and variable costs. For see total cost production can calculated by using formula:

$$TBP = BT + BV \quad (\text{Dumaity, 2004})$$

Information:

TBP: Total production costs (Rp)

BT: Cost still (Rp)

BV: Variable costs (Rp)

Total revenue is calculated using the formula: $T.P = TH \times JUP$
(Dumaity, 2004)

Information:

TP: Total receipts (Rp)

TH: Level price (Rp/kg)

JUP: Amount units production (Kg)

Analysis Income

Farming income is calculated by subtracting the total reception with total cost, with formula:

$$I = T.P - T.C$$

Information:

I: Income (Rp)

T.C: Total cost (Rp)

T.P: Receipts/Total reveneu (Rp)

Analysis R/C Ratio

According to Suratiyah (2015), R/C ratio is comparison between reception with cost total.

$$R/C = \frac{\text{Reception Total (TR)}}{\text{Cost Total (TC)}}$$

Information:

Revenue = The size reception farming paddy ricefield organic (Rp)

Cost = The size cost Which issued in farming paddy ricefield organic (Rp)

Criteria:

R/C > 1, means farming paddy ricefield organic profitable

R/C = 1, meaning organic lowland rice farming is in break even point condition

R/C < 1, means farming paddy ricefield organic is not profitable

RESULTS NAD DISCUSSION

Cost Production Paddy Ricefield Organic in Market Village Canal

The cost of organic rice farming is defined as the amount of costs issued by farmer sample For produce something product in processing his organic rice plants, including fertilizer costs, costs seeds, medicine costs, labor costs and others. Farming costs are shared become 2 that is cost still And cost variable.

Cost Still

Fixed costs are costs that are not influenced by nature by the size of production. According to Tuwo (2011), fixed costs are costs that its use is not exhausted in one planting period. Fixed costs consist of cost shrinkage tools production like tractor, hoe, machete, handsprayer, and etc. In farming paddy ricefield organic cost the tools used are hoes, sickles, sprays and shovels. As for average cost use tools stand long is as following:

Table 2. Average Fixed Costs in Organic Rice Farming in Area Study

No	Details Cost	Cost Still (Rp/MT)	Percentage (%)
1.	Hoe	108,426	13.6
2.	Sickle	113,692	14.2
3.	Spray	471,381	59.2
4.	Shovel	102.317	12.8
	Amount	265,272	100

Source: Results Processed Data Primary Year 2022

From Table 2 it can be seen that average fixed costs (TC) highest The spray cost is IDR 471,381/MT with a percentage 59.2 %, while the lowest average fixed costs (TC) are at shovel costs that is as big as Rp 102,317/MT. Tall low cost shrinkage tool because on use And forever tool farming used by farmer sample. For see details cost shrinkage.

Cost Variable

Variable costs change according to the size of production. Cost variables are costs that are used up in one planting period, which is included Variable costs in research include seeds, organic fertilizer, vegetable pesticides, and the cost of tractor oil. The average variable costs for lowland rice farming organic can seen on Table 3, following

Table 3. Average Variable Costs in Organic Rice Farming in Area Study

No	Details Cost	Cost Variable (Rp/MT)	Percentage (%)
1.	Fertilizer Pen	32,250	4.3
2.	Petroganic	438,750	58.9
3.	POC	38,344	5.14
4.	Making P. Compost	55,525	7.45
5.	Making P. Nabati	32,875	4.41
6.	Seed	102,900	13.8
7.	Tractor Oil	44,000	5.90
Amount		744,644	100

Source : Results Processed Data Primary Year 2022

From Table 3 it can be seen that the average variable cost (VC) is the highest is at on cost fertilizer petroganic that is as big as Rp 438,750/MT with percentage of 58.9%, while the lowest average variable costs (VC) were the cost of manure is IDR 32,250/MT. High and low costs the use of variable costs used by sample farmers.

Cost Power Work Outside Family

Some of the labor used by farmers is manpower family work and labor from outside the family. In the research area farmers who using LK labor with a time wage system of IDR 50,000/day. For more clear cost power Work LK can seen on Table 4, following:

Table 4. LK Labor Costs in Organic Rice Farming in Area Study

No.	Cost Power Work LK (Rp/MT)	Frequency	Percentage (%)
1.	50,000 - 270,000	8	21
2.	271,000 - 491,000	7	18.4
3.	492,000 - 712,000	11	28.9
4.	713,000 - 933,000	6	15.7
5.	934,000 - 1,154,000	2	5.2
6.	1,155,000 - 1,375,000	2	5.2
Amount		38	100

Source : Results Data Processing Primary Year 2022

From Table 4 above, it can be seen that the highest LK labor costs are at IDR 492,000 - 712,000/MT, namely 11 people with a percentage of 28.9%, whereas cost power Work LK Lowest is at on Rp 934,000- 1,154,000/MT and IDR 1,155,000 - 1,375,000/MT, respectively 2 person with percentage 5.2 %.

Total Cost Farming Paddy Ricefield Paddy Organic

Total cost is whole cost Which issued in organic rice farming in the research area. The total cost is obtained by adding up the total fixed costs, variable costs and energy costs work outside the family. The average total cost of organic rice farming in area study can seen on Table 5, following:

Table 5. Average Total Costs for Organic Rice Farming in Area Study

No	Details Cost	Total cost (Rp/MT)	Percentage (%)
1.	Cost still	265,272	17.7
2.	Cost Variable	744,644	36.7
3.	Cost Power Work	485,750	23.9
	Amount	1,495,666	100

Source: Results Processed Data Primary Year 2022

From Table 5 it can be explained that farmers in the research area have desire to produce optimal production. As one way Use fertilizer with the aim of meeting the needs of plants organic lowland rice itself which will later be accompanied by increased production organic lowland rice. From the table it can also be seen that fixed costs have cost amounting to Rp 265,272/MT with percentage 17.7 % and fees variable that is as big as Rp 744,644/MT with percentage 36.7 %, whereas cost labor costs are IDR 485,750/MT with a percentage of 23.9%.

Farming Revenue Paddy Ricefield Organic

Farming income is the total amount of income received from farming from farming which is valued in the form of money or agricultural production results cultivated by farmers multiplied by the selling price of the produce (Hernanto, 1995).

Reception farmer sample in study based on attachment reception highest as big as Rp 15,000,000/MT and Lowest as big as Rp 1,000,000/MT. The size reception can be seen on Table 20 following:

Table 6. Distribution Farmer Sample Based on Reception

No	Reception (Rp/MT)	Frequency	Percentage (%)
1.	1,000,000 - 3,000,000	6	15
2.	4,000,000 - 6,000,000	8	20
3.	7,000,000 - 9,000,000	17	42.5
4.	10,000,000 - 12,000,000	6	15
5.	13,000,000 - 14,000,000	2	5
6.	15,000,000 - 17,000,000	1	2.5
	Amount	40	100

Source: Results Processed Data Primary Year 2022

From Table 6 above, it can be seen that the frequency of receipts from rice farming The lowest organic rice fields are at the level of IDR 15,000,000 - 17,000,000/MT as many as 1 person with a percentage of 2.5 % of sample farmers. Whereas The highest frequency of farming income is at the level of IDR 7,000,000 - 9,000,000/MT as many as 17 people with a percentage of 42.5% of the sample farmers. Acceptance average Rp 7,031,875 farming paddy ricefield from farmer sample.

Income Farming Paddy Ricefield Organic

Income accepted farmers are amount of rice production ricefield multiplied by the selling price (Rp) then deducted by the costs incurred in the farming process. Based on the attachment the highest income is IDR 12,455,375/MT and Lowest as big as Rp 679,160/MT. With average Rp 5,536,209/MT organic lowland rice farming. The amount of income in the region study can seen on Table 21 following:

Table 7. Distribution of Sample Farmers Based on Rice Farming Income Ricefield Organic Which generated in Area Study

No	Income Farming (Rp/MT)	Frequency	Percentage (%)
1.	679,160 - 2,641,862	7	17.5
2.	2,641,862 - 4,604,564	8	20
3.	4,604,564 - 6,567,266	12	30
4.	6,567,266 - 8,529,968	8	20
5.	8,529,968 - 10,492,670	4	10
6.	10,492,670 - 12,455,380	1	2.5
Amount		40	100

Source: Results Processed Data Primary Year 2022

From Table 7 on seen that frequency income farming the highest was at the level of IDR 4,604,564 - 6,567,266/MT as many as 12 people with a percentage of 30% of sample farmers. Meanwhile, income frequency farming Lowest is at on level Rp 10,492,670 - 12,455,380/MT as many as 1 person with a percentage with percentage 2.5 % of farmers sample.

Return Cost Ratio (R/C Ratio)

According to Suratiyah (2015), R/C ratio is big profit farming paddy ricefield organic which accepted by farmer per season plant with a ratio between revenue divided by total costs. If $R/C > 1$ then farming is said to be profitable. In the research, the average R/C ratio value by farmers is $4.7 > 1$, then organic lowland rice farming in the research area considered profitable to pursue. The average R/C ratio value can be seen on Table 22 follows:

Table 8. R/C Ratio Farming Paddy Ricefield Organic in Area Study

No	Analysis R/C Ratio	Amount (Rp/MT)
1	Reception (TR)	281,275,000
2	Total Cost (TC)	59,826,630
R/C Ratio (Reception / Cost)		4.7

Source: Results Processed Data Primary Year 2022

Based on Table 8 above, it can be seen that the R/C ratio value is obtained farmer paddy ricefield organic in area study is 4.7 It means, in organic lowland rice farming in the research area each use costs as big as Rp 1 will produce profit as big as Rp 4.7.

CONCLUSIONS AND RECOMMENDATIONS

Based on results study and discussion so can with drawn conclusion as following:

1. The average income received by organic lowland rice farmers is ie IDR 5,536,209 / MT, this means the income received by farmers Samples can cover all costs incurred in the process production farming paddy fields organic in area study.
2. The R/C Ratio value of 4.7 indicates that the R/C ratio value is > 1 It means farming paddy ricefield organic in Village Market Canal Muara Bulian District, Batang Hari Regency was declared eligible For endeavor, or benefit farmers paddy ricefield organic.

FURTHER STUDY

- a) So that organic rice farming is more effective and efficient, necessary done maintenance Which Good and method Which appropriate in use fertilizer organic Because his role very big in every results agriculture.
- b) For government Regency Stem Day recommended so that can improve technical guidance that has been implemented by the Department Food Crop Farming for lowland rice farmers in particular paddy ricefield organic.

REFERENCES

- Adiwilaga, 2007, *Towards Green Revolution Food Self-Sufficiency* , BRI, Jakarta.
- Adiwilawa, 1992, *Knowledge Farming : Print II*. Alumni, Bandung.
- Andoko, 2010, *Organic Rice Cultivation* , Penebar Swadaya, Jakarta. Andoko, 2005, *Organic Rice Cultivation* , Penebar Swadaya, Jakarta. Arifin, 2012, *Educational Research New Methods and Paradigms* , Bandung.
- Anonymous, 2016. *Ministry Agriculture* , Jambi.
- Assauri, 2006. *Production And factor production*, Spreader Swadaya, Jakarta.
- Body Center Statistics, 2018. *Jambi In Number 2018* . BPS Province Jambi. Jambi.
- BP3K, 2017. *Body Counseling Agriculture* , estuary Bulian. Batanghari
- Service Plant Food And Horticulture, 2018. *Batanghari In Number 2018* . BPS Batanghari Subdistrict estuary Bulian. Batanghari.
- Service Plant Food And Horticulture, 2018. *estuary Bulian In Number 2018* . BPS Batanghari Subdistrict estuary Bulian. Batanghari.
- Daniel, 2002. *Introduction Economy Agriculture* . PT. Earth Script. Jakarta.
- Dody et al , 2007. *Organic Rice Cultivation* , Penebar Swadaya, Jakarta. Dumaity, 2004. *Economy Indonesia* , Yogyakarta.
- Hamdan, 2013. *Analysis Farming Paddy rice fields* , Hall Reviewer Technology Agriculture, Bengkulu
- Hernanto. F, 1996. *Agricultural Science. Self-Help Spreader* ,Jakarta. Hernanto. F, 1996. *Science Farming. Spreader Self-Help* , Jakarta.
- Hernanto. F, 1993. *Method Study And Theory Communication* . UPT. University Muhammadiyah, Poor.
- Mahekam And Malcolm, 1991. *Management Farming Area Tropical* . Publisher LP3ES, Jakarta.
- Mayrowani, Henny. 2012. *Development of Organic Agriculture* Jakarta
- Monograph, 2016. *Village Market Canal* , estuary Bulian.
- Muhananto et al, 2009. *Cultivation Organic Rice* , Self-Help Spreader, Jakarta.
- Mubyarto, 1994. *Introduction Economy Agriculture* . LP3ES. Jakarta.
- Muzdalifah, 2011. *Analysis of Production and Efficiency of Rice Farming in the Regency Banjar*. *Journal Agribusiness rural* , Banjar.
- Parnata, 2010. *Increasing crop yields with organic fertilizer*. Agromedia References. Jakarta.
- Riduwan, 2007. *Formula And Data in Application Statistics*, Bandung.
- Soekartawi, 2001. *Agribusiness, Theory, And Application* . King Grafindo Homeland.Jakarta.
- Soekartawi, 2002. *Farming Business Analysis* . Jakarta: University of Indonesia. Jakarta. Soekartawi, 1995. *Analysis Farming*. UI Press , Jakarta.
- Soekartawi, 2005. *Agribusiness, Theory, And Application* . King Grafindo Homeland.Jakarta.
- Soetrisno, et al, 2003. *Introduction Knowledge Agriculture* , Bayumedia Publishing, Jember.
- Suardi, 2002. *Rice Rooting in Relation to Plant Tolerance Against Drought and Yield* . *Journal. Biotechnology Research Institute and Source Power Genetic Agriculture*. Jakarta.

- Suratiyah. K, 2006. Knowledge farming , Spreader Self-subsistent, Jakarta.
- Suratiyah. K, 2008. Agricultural Science Revised Edition , Penebar Swadaya, Jakarta. Suratiyah, 2009. Knowledge farming, Spreader Self-Help Jakarta.
- Suratiyah, 2011. Agricultural Science, Spreader Self-Help , Bogor.
- Suratiyah, 2015. Agricultural Science, Revised Edition. Self-Help Spreader , Jakarta.
- Sutanto, 2002. Organic Agriculture: Towards Alternative Agriculture and Sustainable. Yogyakarta.
- Suzana et al, 2011. Organic Rice Cultivation , Penebar Swadaya, Jakarta. Tuwo, m A. 2011. Knowledge Farming Theory And Application Going to Success , Unhalu,Press. Kendari.