

ANALYSIS OF CHARACTERISTICS AND LEVEL OF EFFICIENCY ON THE DEVELOPMENT OF ORGANIC RICE (*Oryza Sativa*, L.) FARMING BUSINESS IN BOYOLALI REGENCY

by Agung Prasetyo

Submission date: 27-Mar-2023 01:59PM (UTC+0700)

Submission ID: 2047813642

File name: 56424-151385-1-ED.docx (50.17K)

Word count: 4384

Character count: 24283

5
1 **ANALYSIS OF CHARACTERISTICS AND LEVEL OF EFFICIENCY ON THE**
2 **DEVELOPMENT OF ORGANIC RICE (*Oryza Sativa*, L.) FARMING BUSINESS IN**
3 **BOYOLALI REGENCY**

4
5
6 **ABSTRACT**

7 Certified organic agriculture is a product that has competitiveness and opportunities for export.
8 The aims of this study are (1) This study aims to determine and analyze the characteristics of
9 farmers, (2) Analyze the total cost and Revenue and income of organic rice, (3) analyze the level
10 of efficiency, and BEP (Break-Even Point) certified organic rice farming. . The sampling method
11 used in this study was simple random sampling with a sample of 40 farmers calculated using the
12 Slovin formula. The analysis used is: (1) the analysis of the mean score for the characteristics of
13 the farmers, (2) the method of analyzing costs and revenues and farm income, and (3) the
14 analysis of the efficiency of the farming business using the R/C (Return Cost Ratio) analysis
15 method. The research location was determined purposively, namely Dlingo Village, Mojosongo
16 District, Boyolali Regency. The results of the study concluded that: (1) The characteristics of
17 organic farmers are that men are more involved than women, the age of organic farming business
18 actors is above 50 years, most of the farmers in Dlingo village have lived for more than 30 years,
19 the main livelihood farmers in the agricultural sector. (2) Based on the total average cost for
20 organic farming, the certified group is an average of Rp.20,495,000,- The average revenue is Rp.
21 35,000,000,-. The income per planting season is Rp. 14.505.000,-. Organic certified farmer
22 groups get an R/C ratio value of 1.7 which means that the $R/C > 1$ means that farming with
23 certified organic systems is efficient. Rice farming with a certified organic system is profitable
24 because the BEP value of production volume is $2,927 <$ farmers' production, while the BEP
25 value for production price is $4,099 <$ selling price at the farmer level.

26
27 Keywords: Characteristics, Organic farming, income, efficiency

28
29
30 **Introduction**

31 The development of the agricultural sector needs to be continuously developed so that it is more
32 advanced, efficient, and resilient, as well as the diversity of farm products. These efforts are
33 carried out through diversification, intensification, extensification, and rehabilitation of
34 agricultural land by developing and utilizing science and technology¹. Farm management is an

35 organizational unit of production in the farming field. There will always be elements of land,
36 capital, labor, and management in every farming business, the four of which cannot be separated.
37 The land is a durable element of production that can be passed down from generation to
38 generation.

39 Along with population growth, the need for land for housing, offices, and government buildings
40 is also increasing, and the impact of production land for farming is becoming increasingly
41 narrow. This problem causes farmers' bargaining position to become weaker, limited access to
42 economic opportunities as a source of income outside of agriculture, and will ultimately affect
43 their families' social structure and values . This situation causes farmers to live below the poverty
44 line, so solutions are needed to increase farmers' income.

45 In addition to increasing farmers' income, it can be done by increasing farm productivity through
46 optimal utilization of land potential and the application of agribusiness concepts in farming.
47 Modern farming systems that have long been farmers' choice using chemical inputs have reduced
48 soil fertility, decreased biodiversity, and increased pest, disease, and weed attacks. Another
49 negative impact is the contamination of agricultural products by chemicals, which will harm
50 human health ².

51 Organic agriculture is an agribusiness development effort by increasing land productivity by
52 utilizing local potential, namely natural resources and human resources. According to
53 Chouichom and Yamao³, organic farming is part of the latest efforts to promote a farming system
54 that is both socially and ecologically sustainable.

55 Public awareness of the dangers to health and the environment has shifted from cultivation to
56 organic systems. Organic agriculture, according to IFOAM⁴, is a sustainable agricultural system
57 because it has the aim of meeting human needs while at the same time maintaining or improving
58 the quality of the environment and conserving natural resources. Therefore, sustainability in
59 organic agriculture must be seen in a holistic sense, which includes ecological, economic, and
60 social aspects⁵.

61 According to the Regulation of the Minister of Agriculture of the Republic of Indonesia Number:
62 64/Permentan/OT.140/5/2013⁶, all organic products circulating in Indonesia and claiming
63 "organic" must include the "Indonesian organic logo" and are required to apply for certification
64 to the Organic Certification Institute (LSO).) which has been accredited by the National
65 Accreditation Committee (KAN). The development of certified organic farming aims to give
66 consumers confidence⁷. The organic rice cultivation business of the Pangudi Boga farmer group
67 has been referred to following the provisions of SNI 01-6729-2010 and has subsequently been
68 updated to SNI 01-6729-2016, whose application in groups has been made a guide in the form of
69 SOI (Internal Organic Standards) and for practice guidelines for farmers Prepared Standard
70 Operating Procedures (SOP) for Good Organic Farming Cultivation (GAP-Organic). And SOP
71 for good postharvest handling (GHP-organic)⁸.

72 The implementation of ICS (Internal Control System), part of SNI 01-6729-2016, has been
73 carried out to obtain organic certification from certification bodies. Organizing farmers in
74 organic rice farming innovation, ICS must be robust; without solid farmer groups and suitable
75 group mechanisms, the work of organic rice farming innovation and ICS will not be able to be
76 carried out optimally⁸. For the implementation of the organic rice cultivation business of the
77 Pangudi Boga farmer group, it has complied with the provisions of SNI 01-6729-2010, which
78 was updated in 2016, which was further compiled in the SOI (Internal Organic Standards), and
79 for practice, it used the provisions on Good Organic Farming Practices (GAP). -Organic)⁹. This
80 group applies organic rice farming by utilizing manure, livestock urine, or dried and processed
81 plants into compost. To prevent plant pests and diseases (HPT), biological insecticides are used
82 made from plants, namely betel leaf, tobacco, young areca nut roots, and others. Data from the
83 Pangudi Boga Farmers' Poktan shows that from 2008 to 2017, there was an increase in the
84 number of sales of organic rice and the price of organic rice. The purpose of the organic rice
85 sales market from year to year has grown from the city of Boyolali to sales partners in and
86 outside Central Java Province. Poktan Tani Pangudi Boga is currently cooperating in selling
87 organic rice with several distributors selling organic rice.

88

89 MATERIAL AND METHODS

90 The study was conducted from March to August 2017 in Dlingo Village, Mojosongo District,
91 Boyolali Regency, Central Java Province. The data collected include (1) primary data obtained
92 through field observations and interviews with respondents (farmers) who cultivate organic rice
93 plants using a list of questions that have been prepared¹⁰; and (2) secondary data obtained
94 through literature studies, village monographs, and related agencies related to research (Boyolali
95 District Agriculture Office).

96 The method of determining the research sample was done by a simple random sampling method.
97 The samples taken in this study were members of the Pangudi Boga farmer group, as many as 40
98 farmers who had participated in certified Organic Rice Practices. According to Sugiyono
99 (2003)^{11,12}, the simple random method is a sampling method in such a way that all members of
100 the population have the same opportunity to be selected as samples.

101 Data analysis carried out are:

102 1). Analysis of the Average Score to see the characteristics of farmers

103 The average score analysis was conducted to determine the characteristics of farmers, which
104 include: gender, age, main occupation, primary income, land ownership.

105

106 2). The total costs incurred in the organic rice farming business use the formula:

107 $TC = TFC + TVC$ (where $TC =$ total cost; $TFC =$ total fixed cost, and $TVC =$ total cost
108 variable) ^{13,14}

109 1. The amount of Revenue is calculated using the formula according to Sukirno (2002)¹⁵,
110 namely:

111 ¹² $TR = P \times Q$ (where : $TR =$ total revenue, $P =$ price; and $Q =$ total production).

112 3). Revenue is calculated by subtracting the Total Revenue from the total cost, with
113 the formula, according to Suratiah (2006)¹⁴, is as follows: $I = TR - TC$ (where: $I =$ income,
114 $TR =$ total revenue, and $TC =$ total cost).

115 4). To find out the efficiency of farming is calculated using the R/C ratio approach, namely the
116 ratio between the amount of revenue and the total cost) is calculated using the formula¹² as
117 follows:

118
$$\frac{\text{Total Revenue (TR)}}{\text{Total Cost (TC)}}$$

119 R/C Ratio = -----
120

121 ³ Decision rule:

122 $R/C > 1$ means that the farming is done
123 is efficient.

124 $R/C < 1$ means that farming is done
125 is inefficient.

126 $R/C = 1$ means that the farming is done
127 is to break even.

128 5). BEP analysis (break-even point)

129 BEP (break-even point) is a condition where a business is declared neither profit nor loss and is
130 called the break-even point. BEP is divided into two parts, namely:

131 (1) Production Price BEP

132
$$\frac{\text{total production cost (Rp)}}{\text{= -----}}$$

133

134 total production (kg)
 135
 136 (2) BEP Production Volume
 137 total production cost (Rp)
 138 $BEP = \frac{\text{total production cost (Rp)}}{\text{price of farmer's product (Rp/Kg)}}$
 139 price of farmer's product (Rp/Kg)
 140

8

141 RESULTS AND DISCUSSION

142

143 A. Characteristics of Farmers

144 Gender.

145 The role of men and women in the development of organic agriculture is critical because some
 146 activities are suitable for men to do, and some exercises are right for women to do¹⁶. From the
 147 identification of respondents, that in the management of organic agriculture in Dlingo village, it
 148 can be seen from the data that organic farming is identical with men while women only help¹⁷.
 149 From 40 respondents, it was obtained data that 38 people, or 95%, were men who carried out
 150 organic farming activities, while 2 or 5% were women. From these data, the role of women is
 151 still shallow.

152

153 Age

154 The age factor strongly influences the ability to work or perform physical activities, and the age
 155 factor¹⁸ strongly influences even one's way of thinking. Likewise, farmers in carrying out their
 156 work, farmers aged under 40 years will work more effectively than farmers aged over 40 years.
 157 This is because younger farmers, namely under 40 years of age, are physically stronger and
 158 healthier than older farmers above 40 years of age. Meanwhile, judging from the period that has
 159 been involved in the management of organic agriculture, the average age ranges from 40-50
 160 years. From the 40 respondents, the data obtained from the age of farmers who manage organic
 161 farming are as follows: Age 20 years - 30 years obtained data 0 respondents or empty, age 30
 162 years - 40 years as many as five respondents or 12.5%. While the age of 40 years - 50 years as
 163 many as two people or 5%. Next are the age of 50 - 60 years as many as 23 people or 57.5%,
 164 Age 60 years - 70 years as many as six people or 15%. Age 70 years - 80 years as many as three
 165 people or 7.5%. At the same time, the age above 80 years is one person or 2.5%. From the data

166 above, agricultural businesses are still dominated by farmers aged over 50 years, while the
167 involvement of young people is still low. This will raise concerns about the sustainability of
168 organic farming development in Dlingo village.

169

170 Long residence

171 The length of residence of farmers is very influential on the interaction relationship between
172 farmers. The longer farmers live, the more they know the character between farmers so that it
173 will affect the cohesiveness of farmers in doing farming in groups^{19,20}. From the results of
174 respondent identification, for the length of stay in the village where the average has been
175 occupied since birth, thus also these 40 respondents are very aware of the conditions and
176 situation of their village. From 40 respondents, the data obtained that those who live in the
177 village 20 years-30 years one person or 2.5%, 31 years - 40 years four people or 10%, 41 years -
178 50 years a total of 9 people or 22.5%, 51 years – 60 years as many as 22 people or 55%, while >
179 60 years four people or 10%. From the description above, it shows that most of the farmers in
180 Dlingo village have lived for more than 30 years, so this supports harmony between farmers in
181 developing organic farming in Dlingo village.

182

183 Livelihood

184 Farmers' livelihoods affect the seriousness of farmers in managing organic farming²¹. As for the
185 primary occupation category, the average farmer, only a few people are non-farmers. From 40
186 respondents, data obtained that 38 respondents or 95% became farmers, one person or 2.5%
187 retired civil servants, and one person or 2.5% became a teacher.

188

189 Land ownership status

190 Land ownership is very influential on the sustainability of the development of organic
191 agriculture²². Ownership of the land itself will be more assured of the organicity of agricultural
192 land than leased land whose farming systems have different management. Land ownership by
193 Dlingo village farmers from 40 respondents 39 people or 97.5 is owned by themselves, while one
194 person 2.5% rents land. From the results of the analysis of land ownership data, most of the
195 organic farming lands are owned by themselves.

16

196 Farmer characteristics are the characteristics or traits possessed by a farmer displayed through
197 mindsets, attitudes, and patterns of action towards their environment²³. inherent in a person can
198 be said to be a farmer characteristic. Research results Basriwijaya, KMZ. And Pratomo, H.²⁴

199 stated a positive and significant correlation between farmer characteristics (age, education,
200 dependents, experience, and land area) and lowland rice production.

201 **B. Farming Income Analysis**

202 Farming Fee

203 Costs in an economic sense are all materials that must be borne to provide goods to be ready for
204 use by consumers²⁵. The selection of production inputs influences farming costs. It requires
205 knowledge of the relationship between production inputs, namely land readiness, labor, seeds,
206 fertilizers, pesticides, irrigation, participation in counseling, and production (output). Farming
207 income is strongly influenced by the costs incurred, both variable costs and fixed costs^{26,27}. The
208 variable cost components for certified and uncertified organic farms are the same, covering costs
209 for purchasing seeds, fertilizers, vegetable/organic pesticides, and labor.

210 Based on the average data from organic certified farmer groups, the most variable cost
211 components are labor costs, namely Rp. 7,820,000/ha/planting season or 82.3% of the total
212 variable costs, organic fertilizer Rp. 1,250,000/ ha/planting season (13.2%), seed
213 Rp.300,000/ha/planting season (3.2%), and the cost of vegetable pesticides Rp.
214 125,000/ha/planting season (1.3%).

215 The low cost of fertilizer in the certified organic group, because it uses manure and forages
216 manure. Complete data for the average variable costs in the group are in Table 1.

217 The components of fixed costs for organic rice farming in the study include purchasing
218 equipment and land rent²⁸. Based on the data, the average fixed costs for the two groups are
219 relatively the same because the equipment used, land rent is relatively the same (Table 2). The
220 most significant fixed cost component comes from land rent, which is Rp. 6,000,000/ha/planting
221 season or 55%. Another fixed cost is equipment Rp 5,000,000/ha/ planting season. In
222 comparison, the tax component is not calculated because it becomes the landowner's burden,
223 which is already included in the land rental fee²⁸. Based on the total costs (variable and fixed
224 costs), organic farming from the certified group has a total cost of IDR 9,495,000/ha/ planting
225 season.

226

227 Farm Revenue

228 The amount of income obtained by farmers is influenced by the number of products produced by
229 farmers, and the reasonable selling price, the higher the payment that farmers will obtain. The
230 average productivity for the certified group is 7 tons/ha. This is estimated because the use of
231 organic fertilizers that are used continuously and for a long time will increase the organic matter
232 in the soil. This, of course will affect the fertility of the soil and plants.

233 The selling price of certified organic rice by farmer groups is harvested dry rice from certified
234 organic groups purchased and organized by farmer groups at a price of Rp. 5,000,000/ton.
235 Certified organic rice. The type of rice planted is red rice of the local type "slegreng" which has a
236 market segment separately.

237 Farming revenue is calculated based on the income per planting season. All groups harvested
238 three times in one year. Based on the average farm income, the certified group received an
239 income of IDR 35,000,000/ha/planting season. Total farm revenue after deducting the total cost
240 generates total income. The organic certified group earns Rp. 14.505.000,- / ha/ growing season.
241 Can be seen in table 4.

242 Farming revenue is the multiplication of the production¹ obtained with the selling price of the
243 product. Total Revenue or gross income is the total production value before deducting
244 production costs. The net income of the farm is the difference between Revenue and all costs or
245 total costs. Farmers in obtaining high net income, farmers must strive for high revenues and low
246 production cost²⁹.

247

248 R/C ratio analysis and BEP analysis (break even point)

249 Organic certified farmer groups get an R/C ratio of 2.04, meaning that every 1 rupiah spent will
250 be able to provide 2.04 rupiah in Revenue. The value of Return Cost Ratio (R/C ratio) of 2.04
251 indicates that $R/C > 1$, then farming with organic systems is⁴ profitable (additional
252 benefits/revenues are greater than additional costs). The calculation of the value of the R/C ratio
253 is seen in Table 5.

254 Break event point (BEP) is a condition where in a company or farming operation neither profit
255 nor loss/break-even (income = total cost). The break even point of organic rice farming means a
256 situation where farmers in doing farming do not experience profits and also do not experience
257 losses, meaning that all costs incurred⁵ for production activities can be covered by sales income.
258 Total costs (fixed costs and variable costs) are the same as total sales, so there is no profit or loss.

259 The BEP value for the production volume in table 6 means that the turning point for the organic
260 rice cultivation business is reached if the production volume is 2927 kg/ha of dry grain harvested
261 for one harvest. So that the total production of certified organic rice of 7000 kg/ha for one
262 harvest has exceeded the break-even amount, in other words, making a profit.

263 The BEP of production prices in table 6 means that the turning point is reached if the price of²³
264 unhulled rice is sold at Rp. 4099/Kg, so that the average selling price of organic certified farmers
265 of Rp. 5000/kg has been above the break-even price or in other words organic rice farming is in a
266 profitable position.

267 Farmers who are advanced in doing farming will always think how to allocate inputs or
268 production factors as efficiently as possible to obtain maximum production. If faced with limited
269 costs in carrying out their farming, farmers need to try to increase profits with limited farming
270 costs or in other words how to increase farm production with the smallest input costs^{30,31}.

271 Debertin and Doll and Orazem³², stated that there are two prerequisite conditions that must be
272 met to achieve maximum profit. These conditions are a necessary condition and a sufficient
273 condition. Efficiency is a method used in the production process by producing maximum output
274 by suppressing production expenditures as low as possible, especially raw materials or can
275 produce maximum production output with limited resources. Soekartawi¹³ suggests that the
276 principle of optimizing the use of production factors in principle is how to use these production
277 factors as efficiently as possible. In the concept of production efficiency, technical efficiency and
278 economic efficiency or price efficiency are known³².

279 technical efficiency requires a production process that can utilize small inputs to produce the
280 same amount of output^{25,33}. Technical efficiency in organic rice farming is influenced by the
281 quantity of production factors used. The combination of land area, seeds, organic fertilizers,
282 organic pesticides and labor can affect the level of engineering efficiency^{15,19,25}. The proportion
283 of the use of each of these production factors is different for each farmer. Analysis of production
284 efficiency economically requires information on the selling price of production and the purchase
285 price of production factors used in farming. This causes the assessment of production efficiency
286 economically referred to as price efficiency. Economic efficiency of production needs to be done
287 to see if the production factors used in farming are optimal and provide the maximum level of
288 profit. Economic efficiency is a quantity that shows the comparison between the actual profits.
289 Economic efficiency can be achieved if technical efficiency and price efficiency (allocative) can
290 be achieved.

291

292 CONCLUSION

293 Based on the description of the research results above, it is concluded that The characteristics of
294 farmers who are members of the Pangudi Boga farmer group are: (1) Men are more involved
295 than women, (2) the age of organic farming business actors is above 50 years. (3) Most of the
296 farmers in Dlingo village have lived for more than 30 years, (4) the main livelihood of farmers is
297 the agricultural sector, (5) most of the organic farming lands are their own. Based on the total
298 average cost for organic farming from the certified group an average of Rp.20,495,000,-.
299 Average revenue Rp. 35,000,000,- with an average production of 7 tons/ha and the selling price
300 of dry milled unhulled rice is Rp. 5000/kg. The income of certified organic farmers per planting
301 season is Rp. 14.505.000,-. Rice farming with a certified organic system is efficient and
302 profitable because the Return Cost Ratio (R/C ratio) value of 1.7 indicates that the R/C >1. Rice
303 farming with a certified organic system is profitable because the BEP value of production

304 volume is 2,927 < farmer's production, while the BEP value of production price is 4,099 <
305 selling price at farmer level.

306 **References**

- 307 1. Sumodiningrat. 2000. Pengantar Ilmu Pertanian. Raja Grafindo Persada, Jakarta.
308
- 309 2. Lestari, AP. 2009. Pengembangan Pertanian Berkelanjutan melalui Substitusi Pupuk anorganik
310 dengan Pupuk Organik. *J. Agronomi*. 13(1) : 38-44.
311
- 312 3. Chouichom S, Yamao M. 2010. Comparing Opinions and Attitudes of Organic and Non-
313 Organic Farmers Towards Organic Rice Farming System in North-Eastern Thailand. *Journal*
314 *of Organic Systems*. 5(1) : 25-35.
315
- 316 4. IFOAM.. 2005. The IFOAM Norms For Organic Production and Processing Version 2005
317 www.ifoam.org.
- 318 .
- 319 5. IFOAM. 2009. The Word of Organic Agriculture Statistics & Emerging Trends 2009.
320 <http://www.soel.de/fachtheraaii>.
321
- 322 6. Kementan. 2013. Peraturan Menteri Pertanian Nomor 46/Permentan /OT.140/4 /2013
323 Tentang Pedoman Penilaian Kelembagaan Ekonomi Petani Berprestasi. Jakarta:
324 Kementerian Pertanian.
325
- 326 7. Kementan. 2016. Petunjuk Teknis Fasilitasi Pertanian Organik. Direktur Jenderal Tanaman
327 Pangan.Jakarta: Kementerian Pertanian.
- 328 8. Lechleitner F. and Eisenlohr U. 2004. Revised IFOAM Producer Manual For Setting
329 Up and Harmonizing an Internal Control System (ICS). Swis: Institute for Market
330 Ecology (IMO).
- 331 9. Krishnamurthi. K.K. 2015. Sertifikasi .Grower Group Untuk Pertanian
332 Organik.Ponnaiyarajapuram. Tamil Nadu. India: TNAU Agritech Portal Organic
333 Farming.
- 334 10. Arikunto, S. 1996. Prosedur Penelitian suatu Pendekatan Praktek, Rineka Cipta, Jakarta.
- 335 11. Sugiyono. 2003. Metode Penelitian Bisnis. Edisi 1, Bandung : Alfabeta.
336
- 337 12. Sugiyono. 2010. Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, Dan
338 R&D. Bandung: Alfabeta
339
- 340 13. Soekartawi. 2003. Prinsip dasar Komunikasi Pertanian. Jakarta (ID) : Universitas Indonesia
341 Press.
342
- 343 14. Suratiyah. 2006. Ilmu Usahatani. Penebar Swadaya, Jakarta.
344
- 345 15. Sukirno, S. 2002. Pengantar Teori Mikro Ekonomi. Raja Grafindo Persada, Jakarta.

346

- 347 16. Mislini, 2006. Analisis Jaringan Komunikasi pada Kelompok Swadaya Masyarakat. Kasus
348 KSM di Desa Taman Sari Kabupaten Bogor, Provinsi Jawa Barat. [tesis], Bogor; Program
349 Pascasarjana, Institut Pertanian Bogor.
- 350 17. Elizabeth, R. 2005. Penguatan Dan Pemberdayaan Kelembagaan Petani Mendukung
351 Pengembangan Agribisnis Kedelai. Bogor: Pusat Analisis Sosial Ekonomi dan Kebijakan
352 Pertanian.
- 353
- 354 18. Fagi, A.M. dan I.Las, 2007. “Membekali Petani dengan Teknologi Maju Berbasis Kearifan
355 Lokal pada Era Revolusi Hijau Lestari”. Membalik Arus Menuai Kemandirian
356 Petani. Dalam F.Kasryno, E. Pasandaran dan A. M. Fagi. Yayasan Padi Indonesia. Jakarta.
357 Hlm. 222-249.
- 358 19. Manyamsari dan Mujiburrahmad, (2014), Karakteristik Petani Dan Hubungannya Dengan
359 Kompetensi Petani Lahan Sempit *Agrisepe* Vol (15) No. 2 , 2014. HAL 58-71
360
- 361 20. Mardikanto, T. 1993. *Penyuluhan Pembangunan Pertanian*. Surakarta : Sebelas Maret
362 University Press.
363
- 364 21 Maryowati H. Supriyati T. Sugino. 2010. Analisa Usaha Tani Padi Organik di Kabupaten
365 Sragen.Laporan Penelitian. JIRCAS.
366
- 367 22. Nuryati S dan Dewa K.S. Swastika. 2011. Peran Kelompok Tani Dalam Penerapan
368 Teknologi Pertanian.Jurnal Forum Penelitian Agro Ekonomi. Vol. 29, No. 2, hlm.115-128.
369
- 370 23. OKPO. 2008. Pedoman Sertifikasi Produk Pangan Organik. Otoritas Kompeten Pangan
371 Organik Jakarta: Departemen Pertanian.
- 372 24. Basriwijay, KMZ dan Pratomo H. 2016. hubungan karakteristik petani dengan produksi padi
373 sawah didesa rambah tengah barat kecamatan rambah kabupaten rokan hulu. Semarang :
374 Fakultas Peternakan dan Pertanian Universitas Diponegoro
375
- 376 25. Agus, FX; Suyono, R. dan Hermawan. 2006. Analisis Kelayakan Usaha Tani, Padi Pada
377 Sistem Pertanian Organik Di Kabupaten Bantul, Jurnal Ilmu-Ilmu Pertanian Vol. 2, No. 2,
378 hlm.134-141.
- 379 26. Muhajir N. 1983. Kepemimpinan. Adopsi Inovasi untuk pembangunan masyarakat.
380 Yogyakarta: Rake Press.
381
- 382 27. Padmowihardjo, S. 1994. Psikologi Belajar Mengajar. Jakarta (ID):Universitas Terbuka.
383 Mardikanto, Totok. 1993. *Penyuluhan Pembangunan Pertanian*.Surakarta (ID): Sebelas
384 Maret University Press.
- 385 28. Dineshkumar and priya kogulacumar, 2011. internal control system and its impact on the
386 performance of the sri lanka telecom limited in jaffna district sabina.international
387 journal of advanced computer technology . vol.2, no. 6, p56-64
- 388 29. Hubeis M.; Mukhamad Najib; Hardiana Widyastuti; Nur Hadi Wijaya. 2013. Strategi
389 Produksi Pangan Organik Bernilai Tambah Tinggi yang Berbasis Petani. Jurnal Ilmu
390 Pertanian Indonesia. Vol. 18, No.3, hlm.194-199.
- 391 30. Slamet, M. 2002. *Kumpulan Bahan Kuliah : Kelompok, Organisasi dan*
392 *Kepemimpinan* (tidak dipublikasikan). Bogor : IPB.
- 393 31. Robbins S.P. 2003. Perilaku Organisasi. Edisi Indonesia. Jakarta: PT. Indeks. Saptana dan
394 Ashari. 2007. Pembangunan Pertanian Berkelanjutan Melalui Kemitraan Usaha. Jurnal

- 395 Litbang Pertanian. Vol. 26, no.4, hlm.123-130.
396
397 32. Rita Tutik W, Suwanto, Sundari M.T. 2014. Pengaruh Karakteristik Sosial Ekonomi
398 Terhadap Keputusan Petani Padi Organik Dalam Menjalani Kemitraan Dengan Perusahaan
399 Beras Padi Mulya” Di Kecamatan Sambirejo Kabupaten Sragen.
400 <http://agribisnis.fp.uns.ac.id/wp-content/uploads/2014/04/Jurnal-Padi-Organik.pdf>
401 33. SNI. 2013. Standar Nasional Indonesia No. 6729 Tahun 2013 Tentang Sistem Pangan
402 Organik. Jakarta: Badan Standarisasi Nasional.
403
404

405 Table 1. Average Variable cost/hectare/MT

Cost Component	Total (Rp/ha/MT)	percentage (%)
seeds	300.000	3,2
Manure	1.250.000	13,2
Organic pesticide	125.000	1,3
Labor	7.820.000	82,3
Total	9.495.000	100

406

407 Table 2. Average Fix Cost/hectare/season

Cost Component	Total (Rp/ha/MT)	percentage (%)
Land rent	6.000.000	55
Tools rent		
Depreciation	5.000.000	45
Tax		
Total	11.000.000	

408

409 Table 3. Total Cost/hectare/season

Cost Component	Total (Rp/ha/MT)	percentage (%)
Variable cost	9.495.000	36
Fix cost	11.000.000	54
Total COst	20.495.000	100

410

411 Table 4. Income/MT organic farmers groups

Description	Organic Certified
production (ton/ season)	7,0
Price (Rp/ton)	5.000.000
Revenue (Rp/season)	35.000.000
Cost (Rp/season)	20.495.000
income (Rp/season)	15.495.000

412

413 Table 5. R/C Ratio

Description	Organic Certified
Revenue (Rp/MT)	42.000.000
Total Cost (Rp/MT)	20.495.000
R/C Ratio	2.04

414

415

416 Tabel 6. Break Event Point

Description	Organic Certified
Production (ton/ season)	7,0
Price (Rp/ton)	5.000.000
Total Cost (Rp/season)	20.495.000
BEP of Production	2,927
BEP of price	4,099

417

ANALYSIS OF CHARACTERISTICS AND LEVEL OF EFFICIENCY ON THE DEVELOPMENT OF ORGANIC RICE (*Oryza Sativa*, L.) FARMING BUSINESS IN BOYOLALI REGENCY

ORIGINALITY REPORT

15%

SIMILARITY INDEX

11%

INTERNET SOURCES

9%

PUBLICATIONS

6%

STUDENT PAPERS

PRIMARY SOURCES

1	www.ijsht-journals.org Internet Source	1%
2	uijrt.com Internet Source	1%
3	Nurmalinda, Waryat, S Aminah, A F C Irawati, M Yanis, W S Maharani, C S Ammatillah. "Analysis of rice profitability and marketing in Jakarta", IOP Conference Series: Earth and Environmental Science, 2021 Publication	1%
4	www.e3s-conferences.org Internet Source	1%
5	jurnal.uns.ac.id Internet Source	1%
6	Submitted to King's Own Institute Student Paper	1%
7	repository.unida.ac.id Internet Source	1%

8	<p>Wawan Eka Putra, Satria Putra Utama, Agus Purwoko. "THE CONTRIBUTION OF LABOR IN FAMILY AGAINST ACCEPTANCE OF VEGETABLE FARMING IN RAINFED LOWLAND RICE FIELDS IN PONDOK KELAPA SUB-DISTRICT, BENGKULU CENTRAL DISTRICT", Journal of Agri Socio-Economics and Business, 2020</p> <p>Publication</p>	1 %
9	<p>www.global-regulation.com</p> <p>Internet Source</p>	1 %
10	<p>Submitted to Universiti Sains Malaysia</p> <p>Student Paper</p>	<1 %
11	<p>media.neliti.com</p> <p>Internet Source</p>	<1 %
12	<p>slidetodoc.com</p> <p>Internet Source</p>	<1 %
13	<p>Rohmad Budiono, Fuad Nur Aziz, Endang Dwi Purbajanti, Tsitsino Turkadze, Praptiningsih Gamawati Adinurani. "Effect and Effectivity of Granular Organic Fertilizer on Growth and Yield of Lowland Rice", E3S Web of Conferences, 2021</p> <p>Publication</p>	<1 %
14	<p>download.atlantis-press.com</p> <p>Internet Source</p>	<1 %

15 Submitted to S P Jain Center of Management <1 %
Student Paper

16 jurnal.iainponorogo.ac.id <1 %
Internet Source

17 www.scielo.org.mx <1 %
Internet Source

18 H Irianto, Mujiyo, A Qonita, E W Riptanti. <1 %
"Socio-economic characteristics of farmers on
the existence of floating-rice cultivation
demonstration plots in flood prone area in
Bojonegoro, East Java", IOP Conference
Series: Earth and Environmental Science, 2019
Publication

19 Submitted to Sriwijaya University <1 %
Student Paper

20 ejournal.unib.ac.id <1 %
Internet Source

21 N Busthanul, D Salman, M Syafiuddin, Y <1 %
Lumoindong, A Amir, S Saadah, Darwis Ali,
Askinner. " Comparative cost analysis of
pepper farming income under certification
and non-certification seeds implementation ()
", IOP Conference Series: Earth and
Environmental Science, 2020
Publication

22 www.iosrjournals.org

<1 %

23

Conny N Manoppo, Ibrahim E. Malia, August Polakitan dan, Louise Matindas. "Prospects of Chrysanthemum Development in North Sulawesi", E3S Web of Conferences, 2022

Publication

<1 %

24

archives.palarch.nl

Internet Source

<1 %

25

digilibadmin.unismuh.ac.id

Internet Source

<1 %

26

sumc.lt

Internet Source

<1 %

27

Munawwir Hadiwijaya, Adi Adi. "The Implementation of Multicultural Based Learning in Reducing Intolerance Attitudes among Students", Journal of English Teaching, Literature, and Applied Linguistics, 2018

Publication

<1 %

28

Titin Amelia, Eliza Eliza, Susy Edwina. "Analysis of Income Organik Rice Farmers in Nagari Kamang Mudiak Village Kamang Magek Sub-District Agam Regency West Sumatera", Journal of Agribusiness and Community Empowerment (JACE), 2021

Publication

<1 %

29

Y Surdianto, N Sutrisna, B S Kurnia, Y Argo. "Study of "PATBO SUPER" technology innovation promoting the improvement of cropping index and productivity of rainfed rice in West Java Province", IOP Conference Series: Earth and Environmental Science, 2021

Publication

<1 %

30

jurnal.arkainstitute.co.id

Internet Source

<1 %

31

talenta.usu.ac.id

Internet Source

<1 %

32

www.uni-kassel.de

Internet Source

<1 %

33

Ittisak Jirapornvaree, Tawadchai Suppadit, Vikas Kumar. "Assessing the economic and environmental impact of jasmine rice production: Life cycle assessment and Life Cycle Costs analysis", Journal of Cleaner Production, 2021

Publication

<1 %

34

M H Jamil, N Lanuhu, N Busthanul, E B Demmallino, I Melinda. "The dynamics of farmer groups in Tugondeng Village", IOP Conference Series: Earth and Environmental Science, 2020

Publication

<1 %

35

M S S Ali, E B Demmallino, Ikawani, R I Ardana. "Rice farmers response to agricultural insurance programs", IOP Conference Series: Earth and Environmental Science, 2021

Publication

<1 %

36

Rosita Noviana, Prasmita Dian. "BUSINESS INCOME IN RELATION TO PRODUCTION RISK CASE STUDY: DAIRY CATTLE FARMING BUSINESS IN CISARUA DISTRICT, BOGOR REGENCY, WEST JAVA PROVINCE", Jurnal AGRISEP: Kajian Masalah Sosial Ekonomi Pertanian dan Agribisnis, 2022

Publication

<1 %

Exclude quotes Off

Exclude matches Off

Exclude bibliography On

ANALYSIS OF CHARACTERISTICS AND LEVEL OF EFFICIENCY ON THE DEVELOPMENT OF ORGANIC RICE (*Oryza Sativa*, L.) FARMING BUSINESS IN BOYOLALI REGENCY

GRADEMARK REPORT

FINAL GRADE

/0

GENERAL COMMENTS

Instructor

PAGE 1

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6

PAGE 7

PAGE 8

PAGE 9

PAGE 10

PAGE 11

PAGE 12

PAGE 13

PAGE 14
