The Possibility of Organic Land and Farming Inheritance in the Future: A Case Study in APPOLI (Boyolali Organic Rice Farmers Alliance), Central Java, Indonesia

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Abstract. This research was conducted in Central Java Indonesia, in a farmer group that is APPOLI stands for Aliansi Petani Padi Organik Boyolali (Boyolali Organic Rice Farmers Alliance). This research aims to identify: (1) the pattern and system of inheritance of agricultural land applied; (2) the interest of APPOLI members in the succession of organic rice farming land; (3) the factors that influence the interest of APPOLI members in a succession of organic rice farming land. This research was conducted by survey technique and analyzed using the descriptive method with qualitative and quantitative approaches. The data used are primary data and secondary data. Research location was decided by purposive sampling. Primary data were obtained from 43 respondents. Ordinal logistic regression is used to analyze the data. The result showed that: (1) the inheritance pattern applied is the western inheritance system; (2) APPOLI members have a very high interest in the succession of agricultural land; (3) the factors that significantly influence the interest of APPOLI members in the succession of agricultural land are farmer age, length of experience in organic farming, planting material costs, other costs, family worker costs, and household income outside agriculture.

Keywords: Interest · Organic rice · Farming · Land inheritance · Land succession

1 Introduction

Organic rice farming is an effort to meet the community's need for rice with a sustainable and safe system for health and the environment. The Boyolali Organic Rice Farmers Alliance (APPOLI) is an organization consisting of various farmer groups working on organic rice farming in Boyolali, Central Java, Indonesia. APPOLI has a vision of "Sustainably fulfilling the basic needs of farmers' life and preparing the younger generation to pursue agriculture through the development of organic farming chains." Through this vision, APPOLI conveys the need for farmer regeneration so that organic rice farming can continue. According to [8], farmer regeneration is a process of transferring farming activities from farmers' parents to their successors. Regeneration of farmers is very

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important because (1) there is a phenomenon of aging of farmers, (2) the decrease in the number of young farmers due to the lack of inheritance of agricultural businesses from the older generation to the younger generation, and (3) the agricultural sector is increasingly competitive and requires productive, efficient, and have potential in utilizing modern technology to improve the performance of the agricultural sector [2]. According to [10], almost overall, agriculture is a hereditary occupation that is passed down from parents to their children. The inheritance of agricultural work can be in the form of transferring control and ownership of the business to the next generation, commonly called succession, or inheritance of agricultural land. According to [11], succession generally involves children inheriting agriculture from their parents. The succession process usually occurs when the parents are very old, sick, or even dead.

However, due to the development of employment opportunities in the non-agricultural sector that continues to grow and the existence of bad stereotypes about agricultural work, there is an imbalance between the demand and supply of agricultural labor [21]. In this case, farmer parents have a very important role to encourage their children to continue farming through an attitude of respect for the work of farmers, socialization of skills and transfer of knowledge about agriculture, and inheritance of agricultural assets in the form of land, social networks, and professionalism [7]. [22] Started that one of the factors that influence the younger generation to continue family farming is the inheritance of agricultural land. Thus, farmers' decisions in inheriting land can be said to affect the sustainability of agriculture.

[6] stated that decision-making regarding business successors through inheritance occurs when farmers experience aging conditions. According to [3], the majority of farmers in Boyolali Regency are old-age farmers, which is more than 70% aged 45 years and over. The aging condition of farmers can indicate that farmers are in a decision-making situation regarding business successors through inheritance because of the need for regeneration and succession of farming businesses. According to [12], the decision of farmers to pass the farming business on to their offspring cannot be separated from the influence of the age of the farmer, education level, farm income, other non-agricultural income, length of experience in farming, and the income of the farmer's wife. [23] also stated that the inheritance of agricultural activities cannot be separated from the influence of agricultural land area, availability of capital, and farm production costs.

According to [5], narrow land tenure can have an impact on decreasing the number of young farmers which can hinder agricultural regeneration [15]. State that the decrease in the area of land owned by farmers can be caused by the existence of a land inheritance system by dividing the land. This condition can lead to narrower land ownership that ultimately affects the younger generation not wanting to continue agricultural work. The narrowing of land due to inheritance can then also reduce the commitment of farmers to maintain their ownership, so that farmers are no longer interested in inheriting agricultural land, and tend to want to rent out land, sell land, or convert land [15].

Interest is a desire, willingness, and liking for something [18]. According to [20], interest is a tendency in a person towards an object. According to [19], interest is one of the personality elements that influence future decision-making. Interest can be known through the attitude of pleasure or displeasure shown by someone towards something [1]. Said that interest contains elements in the form of cognition, emotion, and conation.

Interest is preceded by a cognitive element in the form of information or knowledge that a person gets. Then the element of emotion appears as a certain feeling when a person participates in an experience that is similar to affection. Furthermore, the element of conation appears as a continuation of the element of cognition and emotion which is manifested in the form of a willingness to carry out an activity. According to [19], interest can be an impetus for someone to do something and encourage a person's attitude. According to [24], three components can form the structure of attitudes, that is (1) cognitive components related to one's knowledge, views, and beliefs to interpret something; (2) the affective component that relates to a person's emotions towards an event which can be in the form of feeling happy or not happy, agreeing or disagreeing; and (3) the conative component related to a person's behavior to respond to something.

This study aims to determine: (1) the pattern and system of inheritance of agricultural land applied; (2) the interest of APPOLI members in the succession of organic rice farming land; (3) knowing the factors that influence the interest of APPOLI members in a succession of organic rice farming land.

2 Method

The research location was determined by the purposive sampling method. This research was conducted at the Boyolali Organic Rice Farmers Alliance (APPOLI) because it is an organic rice farmer organization that has a vision and various activities to support farmer regeneration. The research was carried out over a period of 2 (two) months starting from October 2021 to November 2021. The data were taken by interviewing 43 farmer respondents of APPOLI members. The data collected includes primary data in the form of farmer profiles, the inheritance system applied, and farmers' interest in the inheritance of agricultural land. The inheritance system applied was identified by interviewing farmers about the pattern of land inheritance they use by several statement items to find out how the process of land inheritance is carried out. Respondents' responses to these statements were then summarized in three thematic problems which are shown in Table 1 below.

Descriptive analytical methods are used to determine the interest of APPOLI members in the agricultural land succession was carried out. The analytical descriptive method is a method by describing the state of the object as it is and makes general conclusions (Table 2). An analytical description was carried out after measuring the data using a Likert scale. The cognitive component is used to identify whether farmers know about the processes of land inheritance and succession. Affective and conative components

Table 1. Identification of APPOLI members' land inheritance patterns

Statement Component	Statement Items
Inheritance processes	Inheritance of agricultural land made with family discussion
	Land inheritance is only given to children who take care of agricultural land
Time of succession	Inheritance of agricultural land is given at the time of death

Table 2. Indicator achievement classes of farmers' interest

Interest Achievement Category	Qualification score
Very low	$1 < x \leq 1.8$
Low	$1.8 < x \leq 2.6$
Medium	$2.6 < x \leq 3.4$
High	$3.4 < x \leq 4.2$
Very high	$4.2 < x \leq 5.0$

Table 3. Statement items to measure the APPOLI members' interest in inheritance land

Interest Component	Statement Items
Cognitive component	Know the definition of land inheritance Knowing how land inheritance occurs Recognizing that land inheritance allows for splitting land ownership status Knowing various land inheritance systems (Islamic, Western, and Custom) Know the difference between Islamic, Western, and Customary inheritance systems Knowing that there is the regulation on land inheritance in Indonesia
Affective component	Have the desire to inherit the land Children are entitled to a share of inherited land Brother and sisters are not entitled to a share of the land inheritance if it is not willed The heirs must continue the function of the land as an organic rice farming business
Conative component	Planning to inherit land to their children Not planning to give inheritance to the siblings Encouraging organic rice farming to continue when it has been inherited Does not allow the heirs to use the land not for organic rice farming

are used to assess the response of farmers to the inheritance of agricultural land. The statement items to measure the interest of APPOLI members in this study are shown in Table 3.

Farmers' interest was measured using a Likert scale by responding to 1 (strongly disagree), 2 (disagree), 3 (undecided), 4 (agree), and 5 (strongly agree) to the statement of identification of farmers' interests given. Furthermore, to describe the interest of APPOLI members toward land inheritance, the indicator achievement classes are divided from the calculation of the mean of the Likert scale and qualification for each indicator class. The higher the mean score, the higher the interest in the variable in question. The limits for each indicator are shown in Table 2.

Then to find out the relationship between the factors studied on the interest of farmers in the inheritance of agricultural land, an ordinal logistic regression test was carried out. If there are J response categories, then the equation of the ordinal logistic regression test can be written as follows.

$$Logit(Y_{j-1}) = ln\left(\frac{Y_{j-1}}{1 - Y_{j-1}}\right) = \theta j - 1 + \beta 1X1 +$$
$$\beta 2X2 + \beta 3X3 + \beta 4X4 + \beta 5X5 + \beta 6X6 + \beta 7X7 +$$
$$\beta 8X8 + \beta 9X9 + \beta 10X10 + \beta 11X11 + \beta 1X12 + \varepsilon$$

Within:
Y = APPOLI members' interest in the succession of agricultural land.
θ = Intercept.
X_1 = Farmer age (year).
X_2 = Education level (year).
X_3 = Experience in organic farming (year).
X_4 = Land area (m^2).
X_5 = Farming revenue (Rp).
X_6 = Family labor cost (Rp).
X_7 = Machine cost (Rp).
X_8 = Planting material cost (Rp).
X_9 = Another cost (Rp).
X_{10} = Depreciation cost (Rp).
X_{11} = Labor cost (Rp).
X_{12} = Non-farm household income (Rp).
β_i = Coefficient.
ε = Error term.

Then to find out the opportunities for each category of interest, calculations are carried out with the assumption that each independent variable is considered constant using the following formula.

$$C_{j-1} = \frac{exp(\theta j - 1)}{1 + exp(\theta j - 1)}$$

Probability for category $j - 1 = C_{j-1}$
Probability for category $j = 1 - C_{j-1}$

3 Result and Discussion

3.1 Farmer's Profile

Based on the geographical location, Boyolali Regency is located on the island of Java which is not directly adjacent to the sea. In 2020, Boyolali Regency's rainfall is recorded to range from 160 to 435 mm during the rainy, the air temperature between 24 - 34 °C, and the sun irradiation reaches more than 70% making Boyolali Regency suitable for the agricultural sector especially rice cultivation [3]. Topographically, Boyolali Regency

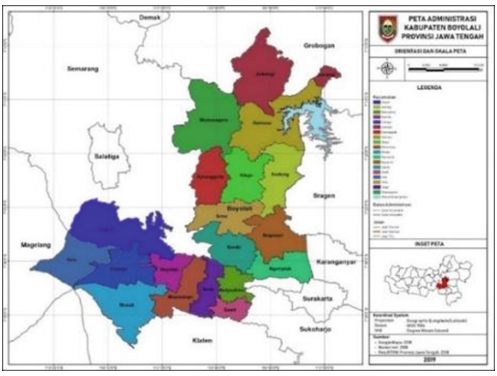

Fig. 1. Administration map of Boyolali Regency. Source: Boyolali Regency Government [3]

has a diverse topography of mountains, valleys, and hills. Boyolali Regency also has direct springs at several points which are used for irrigating rice fields, tourism, and as well as daily springs for residents. According to [5], organic rice production can only be effective in certain areas that have valley or mountainous areas with direct springs, far from industrial areas, and rice fields with terraces to facilitate irrigation regulation. Such topographic conditions can be found in the Mojosongo District, especially Dlingo Village which is the center of organic rice production in Boyolali and the main partner farmers of APPOLI.

APPOLI (Boyolali Organic Rice Farmers Alliance) is an organization consisting of various farmer groups in Boyolali who cultivate organic SNI-certified rice and secondary crops. The APPOLI area covers 7 sub-districts in Boyolali Regency and its surroundings, that is Ngemplak District, Sambi District, Simo District, Nogosari District, Klego District, Mojosongo District, and Kaliwungu District (Semarang Regency), with the secretariat office located in Sambi District.

However, in collecting data for this research, a sample of APPOLI farmers who have privately owned land to cultivate organic rice and who have had children were determined. The profile of farmers who are respondents in this research is shown in Table 4. Based on Table 4, APPOLI members are dominated by men. The work of farmers is usually dominated by men because it requires a lot of energy to do heavy work such as lifting and hoeing. Physically, the male sex generally has greater energy than the female, so the work of farmers that requires qualifications of high physical ability is suitable for men to do (Table 5).

In terms of age, it can be seen that there are no APPOLI farmers who are at a young age. This is because, in addition to the small number of young farmers in APPOLI, the respondents who are taken are also farmers who already have children, so they are likely to be adults. The data shows that farmers in APPOLI are dominated by old and elderly farmers. According to [13], interest can be formed through a situation that is happening and gets attention, which means interest can arise because of a certain situation. In relation to this, individuals in old age and old age are thought already have an interest in inheritance. Individuals in old age and the elderly may have attention to inheritance issues because they feel they need a successor to continue a business or job.

Table 4. Respondents profile

Respondents profile	Category	Total	
		n	%
Sex	Male	40	93.02
	Female	3	6.98
Age	Young (<25 year)	0	0.00
	Adult (25–44 year)	4	9.30
	Old (45–64 year)	18	41.86
	Elderly (>64 year)	21	48.84
Formal education level	Elementary school	16	37.21
	Junior high school	10	23.26
	Senior high school	13	30.23
	College	4	9.30
Land area	Small (<0,5 ha)	35	81.40
	Medium (0,5 - 1,0 ha)	7	16.28
	Large (>1,0 ha)	1	2.33
Experience in organic farming	< 5 year	8	18.60
	6 - 10 year	4	9.30
	11 - 15 year	19	44.19
	16 - 20 year	2	4.65
	> 20 year	10	23.26
Farming revenue	< Rp 5,000,000	8	18.60
	Rp 5,000,000 – Rp 10,000,000	15	34.88
	> Rp 10,000,000	20	46.51
Farming cost	< Rp 5,000,000	17	39.53
	Rp 5,000,000 – Rp 10,000,000	18	41.86
	> Rp 10,000,000	8	18.60
Non-farm household income (per year)	Rp 0	15	34.88
	Rp 1 – Rp 6,000,000	1	2.33
	Rp 7,000,000 – Rp 12,000,000	1	2.33
	Rp 12,000,000 – Rp 18,000,000	4	9.30
	Rp 18,000,000 – Rp 24,000,000	7	16.28
	> Rp 24,000,000	15	34.88

Source: Primary data analysis 2021

Table 5. The APPOLI members' agricultural land inheritance pattern

Statement Component	Statement Items	Identification Resume
Inheritance processes	Inheritance of agricultural land made with family discussion	APPOLI members determine the distribution and system of land inheritance by themselves and discussed with members of the family
	Land inheritance is only given to children who take care of agricultural land	APPOLI members give the inheritance of agricultural land to all children. Meanwhile, if there are children who cannot manage agricultural land, then the management may be represented by children who can take care of agricultural land with a fair distribution of results
Time of succession	Inheritance of agricultural land is given at the time of death	APPOLI members want to give ownership of the land before death. However, the overall succession is carried out when the farmer is very old, sick, or dies

Source: Primary data analysis 2021

In terms of education level, it can be seen that the level of formal education of APPOLI farmers is still relatively low. Besides, APPOLI members who are respondents in this study are farmers with more than 3 years of organic rice farming experience. After 3 years, they have received organic certification, so they can be claimed as a trustworthy organic farming business. The longer the experience, the farmers can have more knowledge about organic farming systems. Farmers with long experience in organic rice farming can also be considered to have a better ability to manage organic rice farming.

The area of land owned by respondent farmers is the area of rice fields owned by farmers to cultivate organic rice farming activities. The land area has an important role in shaping farmers' interest in the sustainability of farming through the inheritance of agricultural land because it is the main object of land inheritance [22]. Found that the land area inherited by farmers' parents can affect the interest of the younger generation to continue family farming. The majority of farmers in APPOLI own small lands (less than 0.5 ha). Small land area is usually caused by land splitting by predecessors when inheriting land. It is feared that the small area of land can make agriculture inefficient and have an impact on the income of small farmers. APPOLI farmers' income from farming results is also relatively low. The low income of farmers is caused by the narrowness of the land. Likewise, income outside of farming is also relatively low, in fact, there are 34.88% of farmers who do not have income outside their farms. And only 34.88% of farmers have income above 24 million per year from non-agricultural sectors.

3.2 APPOLI Member's Agricultural Land Inheritance Pattern and System

The APPOLI members' agricultural land inheritance patterns are shown in Table 5. APPOLI members determine the distribution and system of land inheritance by discussing with the family without coercion or pressure from outside parties. This shows that inheritance is a personal thing for a farming household. Then APPOLI members also stated that in the distribution of agricultural land inheritance, all of their offspring would be given land ownership, regardless of whether the child wanted or could manage the agricultural land or not. However, if there are children who cannot manage agricultural land, farmers allow the management of agricultural land is left to children who can take care of the land with a fair distribution of results so that farming can continue. According to [9], the factor that influences farmers to want to pass on to all offspring is to ensure that their needs are met. According to [12], farmer regeneration carried out through the family can be ideal if it can run sustainably, that is by being balanced with the willingness of the heirs to take care of agricultural land. It means that even if the ownership of agricultural land is passed on to any number of descendants, it will not be a problem as long as the heirs are willing to take care of the agricultural land together.

In the time component of inheritance, APPOLI members want to give ownership of agricultural land to their descendants when they die. Some want to give ownership of their land before death, and there are some farmers who claim to have given part of their land in the form of grants to their descendants. Farmers who have given up part of their land are farmers whose descendants are more than 30 years old. Usually, farmers donate their land to their children after getting married or can manage their

Table 6. Cognitive component

No	Cognitive component	Score	Level of Interest Agree and Strongly Agree (%)
1	Know the definition of land inheritance	4.58	100
2	Knowing how land inheritance occurs	4.44	95.35
3	Recognizing that land inheritance allows for splitting land ownership status	4.47	100
4	Knowing various land inheritance systems (Islamic, Western, and Custom)	4.19	88.37
5	Know the difference between Islamic, Western, and Customary inheritance systems	3.63	65.12
6	Knowing that there are regulations to land inheritance in Indonesia	3.72	72.09
Total		25.02	
Mean		4.17	86.82

Source: Primary data analysis 2021

own agricultural land so that it can become a source of livelihood for their children's households. Meanwhile, farmers who want to give ownership of land before death think that the distribution of agricultural land inheritance can be witnessed directly and can prevent conflicts. According to [25], the average farmer in Indonesia uses a grant system in the inheritance of agricultural land. The grant system is that parents give a certain amount of inheritance while they are still healthy and far from the possibility of death and not through a will. Such a system of grants can also be considered as giving gifts to their descendants. However, the process of succession (transfer of management) of farming on land that is still owned today, as a whole, wants to be done when the farmer is very old, sick, or even dies.

3.3 APPOLI Members' Interest in the Succession of Agricultural Land

Farmer's interest in the succession of organic rice land needs to be known to analyze whether farmers have the desire and encourage their descendants to continue farming land as organic rice farming. The score of the cognitive component (knowledge) of APPOLI members in Table 6 indicate that APPOLI members already know about agricultural land inheritance. Many APPOLI members have knowledge of land inheritance as much as 86.82%. The score of the affective component in Table 7 indicates that APPOLI members strongly agree that their descendants are entitled to a share of the agricultural land inheritance. APPOLI members also strongly agree that the heirs must continue the function of the land as organic rice farming. In addition, APPOLI members also have plans to bequeath agricultural land instead of selling it. Based on these results, it can also be seen that APPOLI members who have an interest in the inheritance of agricultural land seen from the affective aspect are 96.51%. The score of the conative component in the interest of APPOLI members shows a value of 4.67 with the achievement category strongly agreeing. The average score shows that APPOLI members strongly agree to inherit agricultural land to their descendants and encourage the heirs to continue organic rice farming. Based on Table 8, the number of APPOLI members who are interested in the succession of agricultural land seen from the conative aspect is 94.77%.

Table 9 shows that from the cognitive component, APPOLI have understood the issue of land inheritance and the methods of inheritance. The affective component shows that APPOLI member farmers strongly agree that land inheritance will only be given to their child and agricultural land must be continued as organic rice farming. The conative component shows that the APPOLI member farmers strongly agree that they have a plan to pass the land to their child and encourage them to continue their organic rice farming activities.

3.4 Factors Influencing the Interests of APPOLI Members in the Agricultural Land Succession

Interest is influenced by several factors, including internal and external factors. Internal factors that are thought to influence the interest of APPOLI members are in the form of perceived conditions, that is age, education level, and experience in organic farming. Meanwhile, external factors that are thought to influence the interest of APPOLI members are the area of agricultural land owned, farm income, farming costs, and household

Table 7. Affective component

No	Affective component	Score	Level of Interest Agree and Strongly Agree (%)
1	Have the desire to inherit the land	4.56	100
2	Children are entitled to a share of inherited land	4.91	97.67
3	Brothers and sisters are not entitled to a share of the land inheritance if it is not willed	4.49	90.70
4	The heirs must continue the function of the land as an organic rice farming business	4.81	97.67
Total		18.77	
Mean		4.69	96.51

Source: Primary data analysis 2021

Table 8. Conative component

No	Conative component	Score	Level of Interest Agree and Strongly Agree (%)
1	Planning to inherit land to their children	4.95	100
2	Not planning to give inheritance to the brothers	4.67	95.35
3	Encouraging organic rice farming to continue when it has been inherited	4.86	100
4	Doesn't allow the heirs to use the land not for organic rice farming	4.19	83.72
Total		18.67	
Mean		4.67	94.77

Source: Primary data analysis 2021

income outside of agriculture. [26] stated that the factors that made some old farmers reluctant to inherit their offspring was due to several reasons such as finance, education, and motivation. [12] suggested that the factors that can influence the decision of farmers to inherit land are the age of the farmer, the level of education, the results of farming, non-agricultural household income, length of experience in farming, and the location of agricultural land. To know the influence of factors on the interest of APPOLI members, testing was carried out with ordinal logistic regression. From the regression results, an

Table 9. Summary of Interest Score

No	Interest component	Score		Achievement category
		Total	Mean	
1	Cognitive component	25.02	4.17	Understand
2	Affective component	18.77	4.69	Strongly agree
3	Conative component	18.67	4.67	Strongly agree

Source: Primary data analysis 2021

Table 10. Ordinal logistic regression

Variable		Expected Sign	Estimate	P-value
Dependent	APPOLI members' interest in the succession of agricultural land (Y = High)		-22.507	0.058*
Independent	Farmer age	(+)	-0.326	0.042**
	Education level	(+)	0.138	0.598 ^{ns}
	Experience in organic farming	(+)	0.284	0.052*
	Land area	(+)	-0.001	0.196 ^{ns}
	Farming revenue	(+)	-4.856E-8	0.636 ^{ns}
	Labor cost	(-)	-5.193E-7	0.273 ^{ns}
	Machine cost	(-)	-1.328E-6	0.404 ^{ns}
	Planting material cost	(-)	1.964E-5	0.042**
	Another cost	(-)	8.328E-6	0.058*
	Depreciation cost	(-)	-5.201E-7	0.875 ^{ns}
	Family labor cost	(+)	-1.135E-5	0.036**
	Non-farm household income	(-)	-1.017E-7	0.041**

Source: Primary data analysis 2021

equation can be written as follows.

$$Logit(Y_4) = -22.507 - 0.326x1 + 0.138x2 + 0.284x3 - 0.001x4 - 4.86^{E-08}x5 - 5.19^{E-07}x6 - 1.33^{E-06}x7 + 1.96^{E-05}x8 + 8.33^{E-06}x9 - 5.20^{E-07}x10 - 1.14^{E-05}x11 - 1.02^{E-07}x12$$

Opportunity level of interest of APPOLI members in the agricultural land succession through inheritance of agricultural land if the independent variables of age, length of experience in organic farming, planting material costs, other costs, Family labor cost,

Table 11. Odds ratio result

Variable	*Odds ratio*
Farmer age	0.722
Experience in organic farming	1.328
Planting material cost	1.000
Another cost	1.000
Family labor cost	1.000
Non-farm household income	1.000

Source: Primary data analysis 2021

and non-agricultural household income are considered 0 (constant) that is:

$$C_{4(high)} = \frac{exp(-22.507)}{1 + exp(-22.507)}$$

$$C_{4(high)} = 1.6801E - 10$$

The opportunity of farmers' interest level in the high category = $C_{4(high)}$ = 1.6801E-10.

The opportunity of farmers' interest level in the strongly high category = 1 – $C_{4(high)}$ = 9.99E-01.

The probability value of the interest level of farmers in the high category which is close to 0 is lower than the opportunity value of the interest level of farmers in the very high category, which is close to 1, so it can be concluded that the level of interest of APPOLI members in wanting the heirs to continue organic rice farming through land inheritance is in the very high category. The results of the regression analysis that have been carried out show that of the 12 independent variables, there are 6 variables that significantly affect the alpha level of 10%, that is age, planting material costs, family labor cost, household income outside agriculture, length of experience in organic farming and other costs. Based on the results of the regression analysis shown in Table 10, the constants for the 5 interest categories of APPOLI members originating from the column are -22.507, with a significance value of 0.058 which is significant at (10%). So, it can be interpreted that the opportunities for interest in the high and very high categories are significantly different.

The odds ratio value in ordinal regression analysis is obtained by calculating the exponential value of the estimation results to get an interpretation. The results of the calculation of the odds ratio are presented in Table 11. The odds ratio of the age factor is 0.722. These results can be interpreted that every year increase in the age of APPOLI members can reduce the chances of APPOLI members' interest in the organic rice land succession by 0.722. Usually, the older a person has thought about how to pass on the assets they have. [6] state that the older the farmer, there will be critical points for making decisions regarding business successors. However, in this study, the increasing age factor can reduce the chances of APPOLI members' interest in land inheritance. This may be

due to the fact that the majority of older farmers have offspring of adult age who already have jobs outside the agricultural sector. In addition, older farmers who have been doing farmer's work since childhood may have the stereotype that farming is not a profitable job. Thus, old farmers do not want their offspring to become farmers.

The odds ratio of the length of experience in organic farming factor is 1,328. These results can be interpreted that every year increase in the length of experience in organic farming can increase the chances of APPOLI members' interest in the organic rice land succession by 1.328 times. The results of this study indicate that the interpretation of the length of experience in organic farming with age has an inverse relationship. This is probably because the length of experience in organic farming is not always linear with age, because younger farmers may be able to apply organic systems earlier than older farmers.

The odds ratio of the planting material cost factor is 1. These results can be interpreted that every IDR 1.00 increase in the planting material cost factor can increase the opportunity for APPOLI members' interest in the organic rice land succession by 1 time. The cost of planting material includes the cost of procuring seeds. There are APPOLI member farmers who make their own seeds, buy seeds from farm shops, or buy seeds provided by APPOLI. Usually, farmers who make their own seeds set aside rice seeds from the harvest to be used as seeds for the next planting season. The odds ratio of other cost factors is 1. These results can be interpreted that every IDR 1.00 in other cost factors can increase the chance of APPOLI members' interest in the organic rice land succession by 1 time. The other costs included in this study are land tax costs, farmer group contributions, equipment repairs, and transportation costs to the fields. The cost factor generally affects the regeneration of farmers because the greater the costs incurred for farming production, the smaller the income. However, in this study, the cost factor actually had a positive effect on farmers' interest in land succession. This can be caused by the condition of farmers who have a strong desire to inherit their agricultural lands and tend to pay more attention to farming processes such as seed selection and maintenance of agricultural equipment so that the cost of planting materials and other costs incurred becomes greater. According to [17], a good farming culture (regularly managing agriculture) can increase the tendency of farmers to maintain the land as an agricultural business.

The odds ratio of the family labor cost factor is 1. These results can be interpreted that every IDR 1.00 increase in the family labor cost factor can reduce the chances of APPOLI members' interest in the organic rice land succession by 1 time. It should be noted that family labor costs are implicit costs that are not actually incurred by farmers. The cost of family labor represents the number of farmers and families involved in managing agricultural land. Usually, APPOLI farmers involve themselves and several families to manage agricultural land, but the farming families referred to in this study are not only their children but also brothers and sisters of the farmers themselves. Sometimes those who are more involved in taking care of the land are not the children, but the relatives of the farmers. Thus, it can be said that the more owner farmers are involved in managing agricultural land can make them less likely to inherit their land because they feel they are still able to take care of the agricultural land, so their children do not have to manage it.

The odds ratio of non-agricultural household income factors is 1. These results can be interpreted that every IDR 1.00 increase in non-agricultural household income can reduce the chances of APPOLI members' interest in the organic rice land succession by 1 time. The results of this study are in accordance with the statement of [12] that farmers' decision-making to inherit agriculture is influenced by farm household incomes outside of agriculture. According to [15], the factors that can affect the regeneration of farmers in farming households are land area, farm income, education level, age, job opportunities outside agriculture, and so on. This is relevant to the results of this study because farm household incomes outside of agriculture are closely related to employment opportunities outside of agriculture.

4 Conclusion

Based on the results of research regarding the possibility of organic land and farming inheritance in APPOLI, the following conclusions were obtained.

1. The inheritance pattern applied is according to farmer decision and farmer's family discussion.
2. APPOLI members have a very high interest in the succession of agricultural land.
3. The factors that significantly influence the interest of APPOLI members in the succession of agricultural land are age, length of experience in organic farming, planting material costs, other costs, family labor cost, and non-agricultural household income.

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