ISSN:2656-4270 (Online) 1410-4466 (Print)
Accredited by Ministry of Education, Culture, Research, and Technology with the ranking of Sinta (S3) SK NO.164/E/KPT/2021, 27th December 2021

Buletin Penelitian Sosial Ekonomi Pertanian Fakultas Pertanian Universitas Haluoleo
2024:26(1):25-36
https://ejournal.agribisnis.uho.ac.id/index.php/sosek
doi: https://doi.org/10.37149/bpsosek.v26i1.1240

THE ANALYSIS OF WORKING TIME ALLOCATION AND INCOME OF RICE FARMERS IN PULOGEDE VILLAGE TUBAN DISTRICT

Dinda Rhaima Ladisa Putri[1)], Endang Yektiningsih[1*)], Mubarokah[1)]

[1]Universitas Pembangunan Nasional "Veteran" Jawa Timur

**Corresponding author:* endang_y@upnjatim.ac.id

To cite this article:
Putri, D. R. L., Yektiningsih, E., & Mubarokah, M. (2024). The Analysis of Working Time Allocation and Income of Rice Farmers in Pulogede Village Tuban District. *Buletin Penelitian Sosial Ekonomi Pertanian Fakultas Pertanian Universitas Haluoleo*, *26*(1), 25–36. https://doi.org/10.37149/bpsosek.v26i1.1240

Received: May 17, 2024**; Accepted:** May 25, 2024**; Published:** May 26, 2024

ABSTRACT

Unoptimal use of farmers' time leads to low income earned by farmers. The study aims to analyze the working hours of rice farmers, analyze factors that influence the allocation of rice farmers, time, and analyze farmers' income in rice farms. The study was conducted in January-March 2024 in Pulogede, Tambakboyo district, Tuban district. The sampling method is a random proportional sample with 71 farmers as respondents—primary data collection through interviews assisted by questionnaires. The first objective was quantified descriptively, the second used double linear regression analysis using SPSS analysis tools with variables independent of age, land area, working experience, working income, family dependence, and education, and the third objective calculated rice farmer income. The study found that the farmer's working time allocation was influenced by age, size of land, farming experience, farmers' income, number of dependent families, and education. The income earned by the rice farmer is IDR8.870,880/ season.

Keywords: allocation work time; farmers' income; influencing factors.

INTRODUCTION

The agricultural sector is one of the oldest production sectors and business fields in the world and is being conducted by the society. Exploiting agricultural resources is the key to increasing agricultural productivity, so the limited resources must be allocated as efficiently as possible. The agricultural resources, which consist of land, labor, water, and other elements contained therein, are the primary resources for human survival (Hermawan, 2012). The agricultural sector is a prospective sector in Indonesia that has a significant role in development, namely as a source of life and income for farmers and their families. One of the villages that carries out rice farming is Pulogede Village, located in Tambakboyo District, Tuban Regency. Pulogede Village is the highest rice farming production center in Tambakboyo District, with a harvest area of 250 Ha and production of 1,250 tons (BPP Tambakboyo District, 2022). Most people in Pulogede Village are farmers with irrigated and rain-fed rice fields.

The farmer hangs his life on rice farming to meet his life's needs. The average income received by farmers in Tuban district is IDR8,707,740 /4 months, if counted by the month of his opinion. The average household consumption expenditure farmers spend is Rs. 2,176,935 per month (Megawati et al., 2018). His life was IDR3,287,175 per month for food and non-food consumption (BPS, 2022).

According to (Bedemo et al., 2013), farmers in rural areas of developing countries allocate their labor between agricultural and non-farm work. During the planting season, farmers choose to work in the farming sector. Apart from being producers and consumers, farmers also play an essential role as labor providers. Suppose income from agricultural activities does not meet their needs. In that case, farmers try to find work in non-agricultural activities without worrying about the wages they will receive to meet their family's living needs. Therefore, it is essential to study the allocation of farmers' working time so that farmers can manage their time well.

There is a gap between ideal conditions and reality in the working time allocation. Ideally, farmers only need to use 24 hours for all activities such as work, household, personal, social, and free time. The reality is that farmers sometimes have excess time, so they have more free time available, but some farmers don't have free time, so 24 hours a day is considered insufficient. This shows that time allocation is not optimal. The amount of time allocated for productive activities is directly related to farmer income. This will impact the size of the income earned by farmers.

Quoting research (Mahdi & Yulistriani, 2017) regarding efforts to increase income and welfare, what farmers often face in managing farming is a lack of knowledge of how to maximize their performance time. This follows the problems encountered by rice farmers in Pulogede Village, Tambakboyo District, Tuban Regency, so researchers want to research the allocation of farmers' work time to maximize their time to increase income.

Rice farming is essential in Indonesia, especially in the Village of Pulogede, Tuban district. Previous research by (Bedemo et al., 2013) and (Baruwadi, Akib, Saleh, et al., 2019) has looked at the allocation of working time in the agricultural sector. Still, no research has specifically looked at working time allocation and the income of peasant peasants in Pulogede. This research aims to fill the gap by providing empirical data on the working time location, influencing factors, and income of rice farmers in this region. The results are expected to provide new insights into the management of the working time of farmers to improve productivity and income.

MATERIALS AND METHODS

The location and time of research were in Pulogede Village, Tambakboyo District, Tuban Regency, which was carried out from January to March 2024. According to (Sujarweni, 2015), the sample was part of the population. The sampling technique is the method used to determine the sample by paying attention to its nature and distribution to obtain a representative sample. (Sugiyono, 2001). The total population of farmers was 239, calculated using the Slovin formula to get a representative sample, and the resulting sample was 71 people. A proportional random sampling technique was used to take samples. Proportional sampling refers to comparing sampling from several subpopulations that are not the same in number (Margono, 2004).

Table 1. Research Samples

Village	Farmers	Member (People)	Samples (People)
Pulogede	Ngudi Mulyo	78	22
	Suko Makmur	82	25
	Tenaga Agung	79	24
	Total	239	71

Source: (BPP Kecamatan Tambakboyo, 2023)

The data used in this research includes primary data and secondary data. Primary data is data collected directly from interviews with farmers using a questionnaire that has been prepared in such a way. Secondary data is data originating from related agencies as well as relevant journals and books. Working time allocation theory is based on utility theory. Individual time allocation has two choices: working or not working to enjoy their free time. Working means generating wages that will further increase income. Increased income can be used to buy consumer goods that can provide satisfaction (Nalinda, 2006). Farmers' working time allocation is the time farmers use 24 hours every day. Farmers' work time allocation can be calculated using the (Monostory, 2009) in his research "Work, Leisure, Time Allocation," says that 24 hours are used for (1) work, (2) household work, (3) activity time personal, and (4) leisure time, so that the relationship can be formulated:

$$T = 24 = TW + TH + TPA + TL1 \quad (1)$$

Information : T = Total Time in a Day; TW = Working Time; TH = Housework Time; TPA = Personal Activity Time; TL = Laisure Time

According to (As'ad, 1999), work means to carry out a task that ends with income that can be by the person concerned. According to (Mudatsir, 2021), farmers seek income from various sources of business, both those related to agriculture and those not associated with farming. The types of activities that are sources of income for farmers are divided into three sub-sectors: on-farm, off-farm, and non-farm. Household (domestic) work is the activity within the household to support the fulfillment

of family welfare needs from non-economic aspects such as management of daily needs, household hygiene, caring for children's education, laundry, cooking, etc. (Nurfitriani et al., 2018). The time used for personal activities is spent on eating, sleeping, prayer, etc (Mangkuprawira, 1985). Free time has many meanings, according to its analysis, i.e., the time dimension, the dimension of freedom to choose the way it is filled, and the functional dimension (Sukadji, 2000). Based on the time dimensions, free time is the time left after carrying out livelihood activities, fulfilling obligations, and living or interacting in life or existence, such as eating, sleeping, bathing, social activities, and others.
In addition, the allocation of farmers' working time on seeding, land preparation, planting, watering, irrigation, sowing, fertilization, HPT control, and harvesting is calculated on the criterion of working day (HOK) of 8 hours per day (Soekartawi, 2006). With the formula:

HOK = (h x j)/(8 hours) x constant (2)

Description: h = number of working days on a single enterprise; J = the number of hours to work on one enterprise per day; Constant = conversion factor; 1 = for adult men, 0.8 = for rural women, 0.5 = for children

The research uses the dependent variable of farmer's working time allocation (HOK) and independent variables of age, land area, occupational experience, employment income, family dependence, and education to be analyzed using the double linear regression-making analytical tool SPSS. According to (Sugiyono, 2012), a double linear regression is a regression in which a bound variable (Y) is connected to two or more free variables (X). In this case, there are six free and one bound. Thus, double linear regression is expressed in mathematical equations as follows:

$$Y = a + b1X1 + b2X2 + b3X3 + b4X4 + b5X5 + b6X6 \cdots + bnXn + e \quad (3)$$

Description : Y = Allocation of Working Time of Farmers (HOK); X1= Age; X2 = Area of Land; X3= Farming Experience; X4= Farming Income; X5= Number of Family Dependencies; X6= Education; a = Constant; b1, b2, b3 = Regression Coefficient; e = error

Income is analyzed according to (Soekartawi, 2006) by calculating receipts and costs first. Receiving usahatani padi can be calculated by multiplying the production output by the sale price of such output. This equation can be expressed by using the formula:

TR = P x Q (4)

Description: TR = Total Revenue, is expressed in rupiah/season; P = Price, is indicated in rupiah/ season; Q = quantity, is stated in rupiah/kg. Analysis of the amount cost of employment to find out the sizeable average component of production cost per farmer required in the research area, using cost analysis to calculate the cost of production by a farmer, performed using the form:

TC = TFC + TVC (5)

Description: TC = Total Cost, expressed at rupiah/ season; TFC = Total Fixed Cost, stated at rupiah/ season; TVC = Total Variable Cost, stated on rupiah.

This equation can be expressed by using the formula:

Pd = TR-TC (6)

Description: pd = Usahatani income, expressed in rupiah/seasons; TR = Total Revenue, expressed as rupiah/season; TC = Total Cost, expresses as rupiah/seases

RESULTS AND DISCUSSION

Respondent Characteristics

Based on data from the Pulogede Village in 2023, the number of farmers who own rice cultivators in the Pulogede Village is 270 people. This study took 71 respondents from several peasant groups in the Puloguede Village, namely Ngudi Mulyo, Suko Makmur, and Tenaga Agung. Respondent characteristics describe a particular attribute that the subjects in a study possess. The

characteristics of the respondents in this research are grouped into six, namely by age, land area, farming experience, farming income, number of households, and education.

Table 2. Characteristics of respondents

Characteristics	Total (People)	Percentage (%)
Age		
15-64	60	84,5
≥ 65	11	15,5
Land Area (Ha)		
< 1	44	61,9
1-2	25	35,2
>2	2	2,9
Farming Experience (Year)		
< 10	3	4,2
10-25	14	19,8
25-50	49	69,0
>50	3	7,0
Farming Income		
< IDR1.000.000	8	11,0
IDR1.000.000-10.000.000	33	46,0
IDR10.000.000-20.000.000	26	37,0
>IDR20.000.000	4	6,0
Number Of Family Dependents (People)		
<1	2	2,0
1-3	42	59,0
3-5	27	38,0
Education		
Not Completed In Primary School	18	25,4
Primary School	38	53,2
Junior High School	9	12,9
Senior High School	6	8,5

Source : (Processed Data,2024)

The farmer's age is the length of life a farmer has spent until ongoing research is measured in years. The age level also affects a person's ability to make business decisions. The age structure of a farmer will affect his behavior in the face of technological changes or tools of business. The age grouping of the respondent farmers in this study was based on the age categories of unproductive (0 – 14 years), productive (15 – 64 years), and fruitful (≥ 65 years) following the provisions of the Central Statistical Authority. The age of the farmers responding to this study can be seen in Table 2. Table 2 shows that there were 22 respondents aged 30-50 years and 49 respondents aged > 50 years. Almost half of the number of farmers is dominated by old farmers. A situation like this indicates that most people in Pulogede Village who work as farmers are people over 50 years old, reflecting the lack of presence of young farmers in Pulogede Village. The younger generation's interest in agriculture is decreasing because they prefer to work in the industrial sector inside and outside the Village. Pulogede, Tambakboyo District, Tuban Regency. Most respondent farmers in Pulogede Village are in the age range of 15 - 64 years, amounting to 60 people or 84.5%, while the other respondents are more than 65 years, as many as 11 people or 51.5%. Thus, it can be concluded that the majority of respondent farmers are of productive age, meaning that the respondent farmers tend to be able to utilize and follow developments in the empowerment of farming equipment technology that can be used in their organic rice farming activities, in addition to that, farmers are still of a solid age to allocate time for farming well (Rorong et al., 2024).

The land area is the land farmers use to cultivate grain commodities measured in hectares (ha). The location of the land influences the production produced by the farmers, as shown in Table 2. Based on Table 2, it is known that farmers with less than 1 ha of agricultural land are 44 people, then on the area of land 1-2 ha there are 25 people, and for farmers with an area of more than 2 ha, there are two people. The majority of farmers in the Village of Pulogede are small farmers. The extent of the land is related to the allocation of working time because the more significant the farmers' land, the longer the working time allocated to the employers will be. This is because the large land requires

more labor for its management, from the planting to the harvest, so the amount of work time allocation will be more and more devoted to the employee (Baruwadi, Akib, & Saleh, 2019).

Farming experience is the years a farmer has spent working on a farm measured in years. Experience in working on a farm respondents are grouped into five categories. Most farmers who are older than those who are experienced working on the farm are increasing. The farmer's experience depends on how long the farmer has lived on the farm to get the maximum income from the activity, as seen in Table 2. Based on Table 2, the experiences that respondents have in farming vary. Three farmer respondents have farming experience of less than ten years, 14 have farming experience of 10-25 years, 49 have farming experience of 25-50 years, and the remaining three farmer respondents have farming experience of more than 50 years. Working experience is related to the allocation of the farmer's working time because of his experience in managing business. Experience is a person's time in a particular field of work. In this study, the farmer's experience is the amount of time he has spent at the beginning of his business until the survey was conducted. A farmer with a lot of experience will have an emotional attachment to the company, meaning that farmers will devote more time and energy to managing the business (Baruwadi, Akib, & Saleh, 2019).

Farming income is obtained from rice farming activities after deducting revenues and costs. The following are the characteristics of respondents based on farming income in Pulogede Village, as seen in Table 2. Based on Table 2 above, respondents who have incomes less than IDR1,000,000 by 11%, respondents that have an income of IDR1,000,000-10,000,000 by 46%, the respondent with income from IDR10,000,000 to 20,000,000 of 37%, and respondents with income over IDR20.000,000 by 6%. Respondents are dominated by farmers with an income of IDR1,000,000- 10,000,000, which is obtained depending on the size of the land occupied and the farmer's yield. It depends on the size of the cultivated land and the amount of fruit the farmers obtain. The increase in farmers' receipts on employers will result in increased working time allocated to employers. This is because the activities in the business are related to the production produced by the harvest activities (Tambio et al., 2020).

The number of family dependents is the number of family members whose living expenses are borne by the farmer, measured in person units. Each farmer respondent in this study has a different number of family responsibilities, such as the presence or absence of children or elderly parents to support, as seen in Table 2. Based on the data in Table 2, it can be seen that the minimum number of respondents who do not have family responsibilities is two people. There were 42 respondents, or 59% of respondents, with 1-3 family dependents and 27 with 3-5 family dependents. The number of households is linked to the allocation of farmers' working hours as the number of families is increasing, so the amount of family needs to be met is also growing, so it takes more time to work so that the income earned is growing. (Baruwadi, Akib, & Saleh, 2019).

Education is a measure of success for a person. Higher education allows a farmer to learn more about developing field theory, especially in the agricultural sector. This education will be a consideration for farmers when allocating their time optimally. The respondent's level of education also influences the allocation of farmers' work time. Respondents in this study had different levels of education, as can be seen in Table 2, which explains that 18 of the research respondents had incomplete elementary school education, 38 people had graduated from elementary school, nine people had studied up to junior high school, and six people had high school education. Elementary school graduates dominate the highest level of education, with 53.2%. This is because ancient people prioritized work to earn money for daily living expenses rather than going to school to study. A farmer's education is related to their intellectual abilities, which will affect the allocation of their working time to primary or side activities of a productive nature (Baruwadi, Akib, & Saleh, 2019).

Working Time Allocation for Rice Farmers (Every Day)

A farmer's daily working time is the time that the farmer uses for 24 hours. This time is divided into working, household, personal activity, and leisure time. Padi farmers in Pulogede village, Tambakboyo district, and Tuban district also divide their time into four daily activities. Here is the average time a farmer spends in a day, as seen in Table 3.

Table 3. Average time usage of farmers in a day

Working Time (hours)			Household Work (hours)	Personal Activity Time (hours)	Leisure Time (hours)	Total
On Farm	Off Farm	Non-Farm				
6,67	3,26	0,8	1,57	9,41	2,29	24 hours
27,60	13,50	3,4	6,60	39,30	9,60	100%

Source : (Processed Data,2024)

Farmers use this time for activities such as eating, sleeping, worshiping, and so on, where most of the time is spent sleeping 8 hours a day. The ideal time for farmers to sleep is 8-9 hours daily. According to research by (Hidayat et al., 2023), sleep is essential to the human circadian cycle. The quality and quantity of sleep affect many aspects of health, both physical and psychological. Sofarmers need sleep to stay fit and work back to a healthy body.

Time in second order is the time spent working on the farm of 27.6%. On the farm is the farmer's work, which includes the source of income from activities in agriculture. The average farmer takes 6.67 hours downstairs every day to manage the farm. Every day, the farmers go to the farm from 6.00 to 12.00, pause until 13.00, and continue their business activities until 17.00 BC. To harvest, the farmers carry out farm activities such as sowing land cleaning, including soil harvesting and cultivation, planting, watering, irrigation, pollination, HPT control, fertilization, and bird-keeping. The results of this research show that the time spent by rice farmers in Pulogede Village is more than in (Mailumo & Ishaya 2021) research, which states that the average daily time spent by rural people for farming, non-agriculture and relaxing is 4.56 hours, 4.42 hours and 1.59 hours respectively. This is because it is influenced by age, marital status, level of education, farming income, and non-agricultural income.

The time with the farmer's third sequence is the time for off-farm activities. Off-farm activities on a farmer's day take 3.26 hours or 13.5%. The off-farm activities the farmers carry include fish harvesting and the maintenance of cattle or goats. During the day, the time is used by farmers to search for grass, feed cattle, and clean the cattle bars before leaving the field at 05.00-06.00, alongside the activities at the bottom and after the activities at the bottom. Farmers engage in the activities of the farms, such as the cultivation of fish bars and the keeping of cows aimed at investing in the lives of farmers and families, in addition to the purpose of being vigilant when the harvested caterpillar fails so that when the crop fails, farmers can sell such cattle to start harvest and fulfill their daily lives. It supports (Harmoko, 2017) that cattle breeding will increase family income. Therefore, most farmers who breed cattle believe that by breeding cows, they will have more income than they would from selling their cattle.

In the fourth order, time is the leisure time the farmer earns. Farmer's daily leisure is 2.29 hours a day or 9.6%. Leisure time is left after less work, homework, and personal time every day. The peasant padi has free time in the middle of his work in a little field filled with chatting with the other peasants who know how to relax and smoke. The farmers spend most of their free time at home watching TV, drinking, and playing with their children. Padi farmers in Pulogede village and Tambakboyo district still have more rest time or free time compared to free time in (Sahara et al., 2023) that stated that Farmers of Sawah Lahan Tadah Hujan in Boyolali district have 5.39 hours of free time per day or 22.49% of the total daily time.

Time use in the fifth order is the use of time used for domestic or household work. Housework time is spent keeping the house clean, washing, and cooking. The use of domestic time by farmers was 1.67 hours, or 6.6 percent a day. This figure is lower than at other times because respondents are more male farmers and only a short time in domestic activity. Despite the farmer's position as the head of the family, he can still set aside as much as 1.67 hours a day to help with the household/staircase activities that the householder usually does.

Working Time Allocation Rice Farmers (HOK)

According to (Wiranata et al., 2022), the allocation of working time at the enterprise covers the time spent on seeding, soil preparation, planting, irrigation, watering, sowing, fertilization, HPT control, and harvesting. The average time allocation a farmer requires is 90,47 HOK to cultivate pepper. The pepper farmers use in the Village of Pulogede, Tambakboyo district, Tuban district is Inpari 36. This pepper has a harvest life of up to 120 days. The value is almost the same as (Jamil et al., 2018), which stated that the labor requirement on conventional peasantry is 99 HOK. The average time spent by farmers and peasants is shown in Table 4.

According to Table 4. The first usahatani process is sowing; farmers allocate their time for 2.95 days, or the equivalent of 2.95 HOK. In this case, the owners of farmers do not need labor because the sowing work is sufficient to be done by themselves. The second process is land preparation, where the farmers allocate 30.74 days, or the equivalent of 25.62 HOK, for land processing. The time allocation value for land preparation is more significant than the allocation of other time values. This is because land harvesting takes a lot of time and effort before the planting of peas. The third process is planting, where farmers allocate time for planting for 6.29 days or the equivalent of 5.24 HOK. When planting, farm owners are assisted by female farm workers who will be paid for their work. The fourth process is watering, which is done when the plants do not grow within a week, then watering with the same plants. In this study, farmers allocated their time 6.81 days, or the

equivalent of 5.67 HOK. The fifth process is irrigation. The time allocated to the farmer to irrigate is 20.54 days, or the equivalent of 17.12 HOK. The farmers check the irrigation for their crops day and night because the irrigation comes from the mountains, which alternates with other villages. Some farmers' owners are also assisted by farm workers who will be hired daily to manage their meadows' irrigation. The sixth process is planting and harvesting grass or wild crops between crops. Planting work is usually done when the plants are 30-40 HST. The time allocated by farmers in planting activity is 6.90 or 5.75 HOK. In this study, farmers are assisted by male and female peasant workers, whom the farmers' owners and cultivators will hire. The seventh process is pest control of plant diseases, and the working time of the peacock farmer is 6,04 days for three sprayings or 5,03 HOK. The farmers' owners of peacocks are assisted by the peasant workers for the spraying activity and are paid wages.

Table 4. Working time allocation rice farmers

Farming Process	Workers Day (HOK)
Seeding	2,45
Soil preparation	25,62
Planting	5,24
Embroidery	5,67
Irrigation	17,12
Extension	5,75
HPT Control	5,03
Fertilization	5,11
Keep rice from birds	17,00
Harvesting	1,48
Total	90,47

Source : (Processed Data,2024)

The eighth process is fertilization. The allocation of a farmer's working time at the time of fertilization is 6.14 days or 5.11 HOK. This value is small because the fertilizer performs three fertilizations in one growing season with varying plant ages. Each time, the farmer needs two days to carry out his business. The ninth process is to protect the fields from bird attacks, and farmers allocate time to keep the birds from birds for 20.40 days, or the equivalent of 17.00 HOK. Farmer owners are assisted by a few farm workers every day who will be paid to drive out birds. The larger the land that is occupied, the more farm labor is hired. The last process is harvest. The time allocated by the farmer for harvesting is 1.78 days or the equivalent of 1.48 HOK. This value is smaller than the other value in the agricultural activity because if a farmer has rented a combine machine for a day, the harvest work of that day must be completed. In this case, combine one driver and four other people operate machines. The farmers' owners of the carpenter only control this harvest activity.

Factors Affecting Working Time Allocation of Farmers

This study uses a double linear regression analysis method that aims to find out what factors affect the working time allocation of peasants in Pulogede village, Tambakboyo district, Tuban district and how much the influence of age variables, land area, working experience, Usahatani income, amount of family dependence, and education to the allocation of working time of farmers in Pulogede village, Tambakboyo district, Tuban district. The data used in this study is data generated from interviews using a questionnaire. Before creating a dual linear regression model, the authors first tested the classical assumptions to make the research biased.

Table 5. shows the results of linear regression analysis of multiple factors that influence food sustainability. The dependent variable used in this study is the farmer's working time allocation (HOK). The independent variable is a variable that is supposed to be a factor that affects the allocation of farmers' working time, including age, land area, occupational experience, household income, family dependence, and education. Linear regression equations are multiple factors that affect the allocation of farmers' working time in Pulogede Village, Tambakboyo District, Tuban District, as follows:

$$Y = a + b1.X1 + b2.X2 + b3.X3 + b4.X4 + b5.X5 + b6.X6 + e$$
$$= 14.0151.389 + 7.180 + 0.577 + 46,990,000 + 2.522 - 1.666 + e \quad (7)$$

A regression model that uses two or more independent variables can be seen from the value of the Adjusted R square. The adjusted r-square value will only increase if a new or additional variable

influences the dependent variable in a regressive model. The results of the coefficient test in Table 5 above show that the Adjusted R Square value in the regression model of this study is 0.710. This proves that variables consisting of age, land extent, occupational experience, employment income, family dependence, and education can explain the variable Farmers Working Time Allocation (Y) of 71% and the remaining 29% explained by other variables outside this study model.

Table 5. Factors affecting the working time allocation of farmers

Var	Coefficient	Sig.
C	14.015	0.065
Age	-1.389	0.000
Land Area	7.180	0.000
Farming Experience	0.577	0.000
Farming Income	4.699E-7	0.001
Number Of Family Dependents	2.522	0.000
Education	-1.666	0.000
Sig F		0.000
Adjusted R Square		0.735

Source : (Processed Data,2024)

After the determination coefficient test, the advanced test is test F. This test is intended to look at the influence of simultaneously independent variables on dependent variables. Test-F can be seen in Table 5 through the significance value of F. The determination value on test F is 0,000, where 0,000 ≤ 0.05 means simultaneously or collectively independent variable farmer's age, land area, occupational experience, household income, family dependence, and education influence farmers' working time allocation.

Test T determines whether the independent variable of farmer's age, land area, agricultural experience, employed income, number of household dependents, and partial (only) education influences the dependent variable of farmer working time. These results are similar to a study conducted by (Baruwadi, Akib, & Saleh, 2019), which concluded that the age of farmers determines their productivity in doing business activities. So this directly affects the allocation of working time on business. The older the farmer, the lower the allocation of time for farming. The effect of this age can be seen from the value of the regression coefficient obtained, which is b1 = -1.389. This value indicates that an increase of one unit of the farmer's age will cause a decrease of 1,389 HOK in the working time allocated to the farmers. Partially, the age significantly influences the allocation of farmers' labor time to the industry. The result is similar to a study conducted by (Baihaqi et al., 2022), which concluded that the variable of the land area has a real influence on the variables of the agricultural labor time allocation (0,000 ≤ 0,05) then H0 is rejected, and H1 is accepted, so that the land-wide variable has a significant impact on the allocation of the farmers' working time. The larger the area of the farmer's land, the longer the working time allocated to the farming process will be higher. This is because the large land requires more energy and for the time of its management from planting to harvest, so the number of allocations of farming time will be more and more spent on farming.

The effect of Working Experience on Working Time Allocation of Farmers (X3) Based on the t-test obtained a significance value (0,000 ≤ 0,05) then H0 was rejected, and H1 was received so that the working experience variable had a tangible impact on the work time allocation of farmers. The farmer's experience is related to managing the business that he is in, from the processing of the land to the harvest. According to the analysis results, the regression coefficient value for the farmer's experience is b3 = 0.577. The value of this coefficient indicates that an increase in the agricultural experience of one unit will result in a rise in the allocation of working time in corn farming 0.577 HOK. (Baruwadi, Akib, & Saleh, 2019) concluded that the higher a person's experience on the farm, the longer the work time allocation distributed in the use of the corn is. There is a relationship between experience and the allocation of farmers' working time related to business management. Experienced peach farmers will always strive to improve or at least maintain their peach crops' productivity. They master the maintenance techniques up to the harvest to get the best results, so the time allocated will also be higher.

The effect of Employment Income on Working Time Allocation of Farmers (X4) Based on the t-test obtained the value of significance (0,000 ≤ 0,05) then H0 is rejected, and H1 is accepted, so that the variable number of household dependence has a real influence on the working time allocation of farmers. The result is similar to the study carried out by (Baruwadi, Akib, & Saleh, 2019), which

concluded that an increase in income obtained from maize usahatani by one unit will increase working time allocation in maize Usahatani. Based on the analysis results, the regression coefficient value for farmers' education is b4 = 4.699E-7. The value of this regression factor indicates that the increase of income gained from farmers' by a single unit will increase working hours allocation to farmers with 4.6999E-7 HOK. This suggests that the higher the revenue earned from the business, the higher the working hours allocated to the company.

The effect of Family Dependency Count on Working Time Allocation of Farmers (X5) Based on the t-test obtained a value of significance (0,000 ≤ 0,05) then H0 is rejected, and H1 is accepted, so that the variable number of family dependencies has a real influence on the working time allocation of farmers. The results are similar to a study conducted by (Baruwadi, Akib, & Saleh, 2019), which concluded that the number of households positively influences the allocation of farmers' working time on business. The result shows that the greater the family burden, the more time is allocated to the company. The positive impact of the family's burden on the allocation of farmer's working time is due to two factors. First, the more significant number of members in the family to be financed by the farmer requires a farmer to devote his time to the employer who has a substantial contribution to the household's income. Second, the family members who are the burden of the farmers have a family member of the productive age so that they can help farmers in various business activities, which has a positive effect on the allotted work time allocation. Education is a measure of success for a person whose higher education allows a farmer to acquire a more profound knowledge of developing field theory, especially in agriculture (Harya & Wahyuningrum, 2023).

The impact of Education on Working Time Allocation of Farmers (X6) Based on the t-test, it obtained a value of significance (0,000 ≤ 0,05), then H0 was rejected, and H1 received, so the educational variable had a real influence on the work time allocation of farmers. The results are similar to a study conducted by (Baruwadi, Akib, & Saleh, 2019), which concluded that the higher the level of education of farmers, the lower the allocation of their working time to employers. Based on the analysis, the regression coefficient value for farmers' education is b6 = -1.666. This value indicates that an increase of one unit in farmers' education will decrease the allocation of time in the agricultural industry by 1.666 HOK. This result shows that, alone or partially, the education of farmers does not have a real influence on the allocation of their working time in the rural industry. Farmers will be inclined to look for other job alternatives that match their education outside the business to allocate their labour efficiently. This suggests that the allocation of farmers' working hours will also become more efficient and less efficient, along with the increasing level of education for farmers.

Income Rice Farmer

1. Cost Analysis

The cost of production is the total cost spent to meet the production needs of goods and services. The total expenditure is money used to produce a product during a period. The cost is divided into two: fixed cost and cost. Variable. In calculating the total cost, sum the average of the variable cost and the ratio of fixed cost. Here is a presentation of the total cost outcome on rice farming, which can be seen in Table 6 below.

Table 6. Total cost of rice farming

Type Of Cost	Average Cost(IDR/MT)
Variable Cost (VC)	
a. Seeds	416.802
b. Fertilizers	2.822.253
c. Medicines	257.532
d. Labor	6.683.528
Total	10.180.115
Fixed Cost (FC)	
a. Reduction Of Equipment	48.883
b. Tax	206.059
Total	254.942
Total Cost (TC)	10.435.057

Source : (Processed Data,2024)

Table 6. shows that the variable cost of harvesting peas in the Village of Pulogede in a single harvest season is IDR10,180.115,- and the fixed cost of IDR254,942,-, The total cost spent by farmers in the Village of Pulogede is less if compared to research (Hidayatulloh et al., 2022), which

stated that the significant cost of production paid by the farmers in the Village of Capar district of Salem district Brebes in the farming of the rainfall rainforests per hectare amounted to IDR13.294.783,58 in one production. The use of labor is the highest cost of variable expenses amounting to IDR6,683,528,- in one growing season. It's because farmers use a lot of extra-family labor in the business, and the price of labor is quite expensive. The average price of labor in various industries depends on the job's difficulty. The price of labor that is affordable is the price for the seed process of IDR75,000/day/person, while the highest price of the labour is the price for the harvest process is IDR100,000/ person/day.

2. Revenue Analysis

Acceptance of rice farming is the result of times between the amount (Quantity) of padi produced in units of kilograms (kg) and the sale price of the rice in a unit of rupiah (IDR). (IDR) then the more significant the receipt obtained. The receipts received from farmers in the Village of Pulogede, Tambakboyo district, Tuban district are the result of the peat alone, i.e., with a total average output of 3,613 tons at the price of IDR4,800,-/kg, with the total value of the receipt being IDR19,305,938,- with an average land area of 0,877 hectares.

Table 7. Total cost of rice farming

Production (Ton)	Price (IDR/Kg)	Value (IDR/MT)
4,022	4.800	19.305.600

Source : (Processed Data,2024)

Based on Table 7. it can be seen that the receipts are obtained from the result of the gross sales produced, which is as much as 4,022 kg and multiplied by the gross sale price per kilogram is IDR4,800 /kg, and the total receipt of IDR19,305,600. Marketing is usually done directly from the fields or farmers' houses. This agrees with research (Aprillia & Utami, 2022) between producers and grain intermediaries or farmers to get grain at low prices, producers and consumers and distributors to market rice ready for consumption. The existence of this network makes it easier for producers to purchase grain and sell rice. Social capital here plays a role in forming relationships between each actor who plays a role in selling rice. Like a network between grain intermediaries and rice producers, producers can easily get information regarding rice or grain ready to harvest.

3. Income Analysis

Farming income is the difference between farming receipts and total costs spent in one production.

Table 8. Rice income farming in Pulogede Village, Tambakboyo District, Tuban district

Description	Value (IDR/Mt)
Total Revenue	19.305.600
Total Cost	10.435.057
Income	8.870.880

Source : (Processed Data,2024)

Based on Table 8, you can find the household income in the Village of Pulogede by adding both fixed and variable costs (Soekartawi, 2002). Income refers to the profits earned by each farmer from the cultivation season. The average cultivation income of the season is IDR26.612.640 per year with three cultivation seasons, so for one plantation season, the average income is IDR8.870.880 per season. The income earned by each farmer varies depending on the output of production and the size of the land used by the farmer. The size of this income is already sufficient and can be said to be successful because the costs spent, both fixed and variable costs, can be paid. Besides that, farmers also get the difference in profits or profits. The benefits farmers earn vary depending on the size of the respondent's land. Based on the results of interviews with respondents, the land conditions in the area are perfect for rice farming because the conditions of the land are always wet even in the rainy season, so it is not an obstacle for the people in the region. In addition, according to the Field Farmers, farmers in the research area are less responsive in adopting agricultural technology, especially in cultivating wild beans. So this gain is still not optimal because it hasn't gained 100 percent. Then, it is necessary to rebuild the farmer's construction model to increase the production of peas.

Not much research has been done on allocating farmers' working hours, but each researcher has its characteristics related to the topic. The novelty of this research is the use of monastery theory

that counts the time a farmer takes every day to work, the time of household work, time of personal activity, and leisure time. This research is essential for farmers as it provides new insights into working time management where farmers can consider their time to work and other activities that can increase productivity and income. In the process of conducting this research, there is a limitation that may influence the results of the research, namely that the number of respondents that were only 71 people, of course, is still less to describe the actual situation. This research only examines a few variables that affect farmers' working time allocation, so other variables need to be developed for the research to flourish. While searching for data, there is a lack of respondents' ability to understand the statement on the questionnaire and the honesty in filling out the questionnaire so that the result may be less accurate.

CONCLUSIONS AND SUGGESTION

This research suggests that a peasant's working time in a day is divided into personal time, business work, work outside the field, leisure time, and household work time. In addition, the working time allocation for rice farmers requires HOK 90.47 / the growing season. The average income of a farmer is as much as that of a rice farmer, which is IDR8,870,880 per growing season. These results show the importance of effective working time management to boost productivity and farmers' incomes.

REFERENCES

Aprillia, M., & Utami, D. (2022). Jaringan Sosial Produsen Besar di Desa Leran Kulon Kecamatan Palang Kabupaten Tuban. *Paradigma*, *11*(1). https://ejournal.unesa.ac.id/index.php/paradigma/article/view/49009

As'ad, M. (1999). *Seri Ilmu Sumber Daya Manusia Pikologi Industri*. Liberty.

Baihaqi, A., Ajijah, N., Deli, A., & Ariani, R. (2022). Alokasi Waktu Kerja Keluarga Petani Kopi di Dataran Tinggi Gayo. *Jurnal Ekonomi Manajemen Dan Bisnis*, *23*(2), 79–88. https://doi.org/10.29103/e-mabis.v23i2.862

Baruwadi, M. H., Akib, F. H. Y., & Saleh, Y. (2019). *Alokasi Waktu Kerja (Aspek Pada Model Ekonomi Rumah Tangga Jagung)*. UNG Press Gorontalo.

Baruwadi, M. H., Akib, F. H. Y., Saleh, Y., & Bakari, & Y. (2019). The Utilization Of Leisure Time Of Corn Farmer Household In Gorontalo, Indonesia. *International Journal Of Engineering Sciences & Research Technology*, *8*(11), 165–175. www.ijesrt.com/Old_IJESRT/issues%20pdf%20file/Archive-2019/November-2019/18.pdf

Bedemo, A., Getnet, K., & Kassa, B. (2013). Determinants of Household Demand for and Supply of Farm Labour in Rural Ethiopia. *Australian Journal of Labour Economics*, *16*(3), 351–367. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.678.3764&rep=rep1&type=pdf

Harmoko. (2017). Tingkat Motivasi Petani Dalam Beternak Sapi Di Kecamatan Sambas Kabupaten Sambas. *JSEP (Journal of Social and Agricultural Economics)*, *10*(1), 1. https://doi.org/10.19184/jsep.v10i1.5217

Harya, G. I., & Wahyuningrum, W. (2023). Analisis Kelayakan Usahatani Kunyit Petani Desa Petiken yang Tergabung Dalam Kelompok Tani BPP Driyorejo Kabupaten Gresik. *Jurnal Ilmiah Manajemen Agribisnis*, *11*(2), 112–120. https://doi.org/10.33005/jimaemagri.v11i2.17

Hermawan, I. (2012). Analisis Eksistensi Sektor Pertanian terhadap Pengurangan Kemiskinan di Pedesaan dan Perkotaan. *Jurnal Sosial Dan Pembangunan*, *28*(2), 135–144. https://doi.org/10.29313/mimbar.v28i2.348

Hidayat, M. T., Nurmaulid, A., Wulandari, D. S., Muto'an, A. S., & Aditya, D. (2023). Hubungan Gelombang Cahaya Lampu dan Cahaya Biru dengan Kualitas Tidur Remaja Dewasa. *Bhinneka: Jurnal Bintang Pendidikan Dan Bahasa*, *2*(1), 39–51. https://doi.org/10.59024/bhinneka.v2i1.621

Hidayatulloh, J., Noor, T. I., & Sudrajat. (2022). Analisis Kelayakan Usahatani padi Sawah Tadah Hujan Di Desa Capar Kecamatan Salem Kabupaten Brebes. *Agroinfo Galuh*, *9*(1), 289–296. https://jurnal.unigal.ac.id/agroinfogaluh/article/view/6684

Jamil, A. S., Saleh, I., Sungkawa, I., & Mardhatilla, F. (2018). Analisis Perbandingan Kelayakan Usahatani Padi Organik Dan Konvensional (Studi kasus: Kecamatan Cigugur Kabupaten Kuningan Jawa Barat). *Prosiding Seminar Nasional Fakultas Pertanian Universitas Jambi Tahun 2018*, 530–539. http://conference.unja.ac.id/SemnasSDL/article/view/59

Mahdi, & Yulistriani. (2017). Profil, Alokasi Dan Pendapatan Tenaga Kerja Pada Perkebunan Kelapa Sawit Rakyat Di Kabupaten Solok Selatan. *Agrisep*, *16*(1), 25–32.

https://doi.org/10.31186/jagrisep.16.1.25-32

Mailumo, S. S., & Ishaya, E. (2021). Time Utilization On Farm, Non-farm And Leisure Activities By Rural Women In Jos East, Plateau state, Nigeria. *International Journal of Development and Sustainability*, *10*(3), 97–105. https://isdsnet.com/ijds-v10n3-02.pdf

Mangkuprawira, S. (1985). Alokasi Waktu dan Kontribusi Kerja Anggota Keluarga dalam Kegiatan Ekonomi Rumahtangga (Studi Kasus di dua Tipe Desa di Kabupaten Sukabumi di Jawa Barat). *Fakultas Pasca Sarjana, Institut Pertanian Bogor, Bogor.*

Margono. (2004). *Metodologi Penelitian Pendidikan*. Rineka Cipta.

Megawati, E. D., Djohar, N., & Suhirman. (2018). Analisis Pendapatan Usahatani Jagung Hibrida Varietas Pertiwi-2. *Jurnal Agribisnis Dan Pertanian Berkelanjutan*, *3*(2), 1–6. https://ojs.ejournalunigoro.com/index.php/oryza/article/view/185

Monostory, J. (2009). *Work, Leisure Time Allocation*. Turkey European Social Report.

Mudatsir, R. (2021). Analisis Pendapatan Rumah Tangga Dan Tingkat Kesejahteraan Petani Kelapa Sawit Di Kabupaten Mamuju Tengah. *Journal Tabaro Agriculture Science*, *5*(1), 508–516. https://doi.org/10.35914/tabaro.v5i1.760

Nalinda, R. (2006). Alokasi Waktu Kerja Keluarga Pengrajin Emping Melinjo Di Kecamatan Mlati Kabupaten Sleman. *Jurnal Ilmu-Ilmu Pertanian*, *2*(1), 73–86. https://journal.polbangtanyoma.ac.id/jiip/article/view/309

Nurfitriani, Widjayanthi, L., & Sofia. (2018). Peran Ganda Perempuan Yang Bekerja Di Pembibitan Tanaman Sengon Di Desa Wonocoyo Kecamatan Pogalan Kabupaten Trenggalek. *Jurnal Ekonomi Pertanian Dan Agribisnis*, *2*(2), 377–388. https://doi.org/10.21776/ub.jepa.2018.002.05.4

Rorong, F., Tumewu, P., & Pamandungan, Y. (2024). Kajian Penerapan Teknologi Budidaya Tanaman Dan Produktivitas Padi Sawah (Oryza sativa L.) Di Kecamatan Dumoga. *Agri Sosioekonomi*, *20*(1), 13–22. https://doi.org/10.35791/agrsosek.v20i1.52324

Sahara, D., Chanifah, & Joko Triastono. (2023). Faktor-Faktor yang Memengaruhi Waktu Luang Petani Padi Gogo di Kabupaten Boyolali, Jawa Tengah. *Jurnal Pangan*, *32*(2), 111–120. https://doi.org/10.33964/jp.v32i2.624

Soekartawi. (2002). *Prinsip-Prinsip Dasar Ekonomi Pertanian*. PT. Raja Grafindo Persada.

Soekartawi. (2006). *Analisis Usahatani*. Universitas Indonesia.

Sugiyono. (2001). *Statistika Untuk Penelitian*. Alfabeta.

Sugiyono. (2012). *Metode Penelitian Kuantitatif, Kualitatif,dan R&D*. Alfabeta.

Sujarweni, V. W. (2015). *Metodologi Penelitian Bisnis Dan Ekonomi*. Pustaka Baru Press.

Sukadji, S. (2000). *Psikologi Pendidikan dan Psikologi Sekolah*. Lembaga Pengembangan Sarana Pengukuran dan Pendidikan Psikologi (LPSP3) Fakultas Psikologi, Universitas Indonesia.

Tambio, F., Baruwadi, M. H., & Halid, A. (2020). Analisis Pendapatan Petani Penggarap Usahatani Jagung Desa Potanga Kecamatan Botumoito Kabupaten Boalemo. *Agrinesia : Jurnal Ilmiah Agribisnis*, *5*(1), 1–7. https://ejurnal.ung.ac.id/index.php/AGR/article/view/11813

Wiranata, L. M. H., Zubair, & Swadnya, W. (2022). *Alokasi Waktu Kerja Dan Pendapatan Usahatani Padi Sawah Di Desa Penujak Kecamatan Praya Barat Kabupaten Lombok Tengah*. Universitas Mataram.