



UDC 331; DOI 10.18551/rjoas.2023-06.15

**ANALYSIS OF WOMEN LABOR ALLOCATION IN RICE PADDY FARMING
ON TIDAL SWAMP LAND OF SUNGAI TABUK SUB-DISTRICT, BANJAR DISTRICT
OF SOUTH KALIMANTAN PROVINCE, INDONESIA**

Adawiah Rabiatul*, Husaini Muhammad, Ikhsan Sadik

Master's Study Program of Agricultural Economics, Faculty of Agriculture,
University of Lambung Mangkurat, Banjarbaru, South Kalimantan, Indonesia

*E-mail: rasyifatul.siagian@gmail.com

ABSTRACT

This study aims to analyze the amount of female farmer labor outpouring of the total labor allocation in lowland rice farming, lowland rice farmer household income and the factors that influence the outpouring of female farmers in lowland rice farming in tidal swamp land in Sungai Tabuk Sub-District, Banjar Regency, South Kalimantan Province. This research was conducted in Sungai Tabuk District starting from April-November 2022. The analytical tools used were multiple regression, income and descriptive analysis. The results showed that the outpouring of female farming labor was 20.53 HKO or 39.84% of the total workforce in rice farming which reached 51.78 HKO/farm. The total income of rice farming households on tidal land in Banjar Regency is IDR 32,084,374/year. Factors that significantly influence the outpouring of female farm labor in paddy rice farming activities, namely the age of the female farmer, the number of dependents of the female farmer's family, the wages of the female farmer, the area of land cultivated by the female farmer, the level of education of the female farmer, the level of experience in farming rice and family income.

KEY WORDS

Allocation of labor, peasant women, tidal marshes.

Banjar Regency is one of the rice production centers in South Kalimantan Province which occupies the 2nd position after Barito Kuala Regency in 2019. Rice production in Banjar Regency in 2020 has decreased by 77,504.66 tons or by 31%. This was due to the paddy harvested area which also decreased by 26,224.20 ha or by 34% (BPS South Kalimantan, 2021).

Sungai Tabuk District has a tidal area of 7,157 ha and is one of the rice production centers in Banjar Regency. Rice production in this sub-district took first place in 2019. However, in 2020 production has decreased by 10,044 tons. The decline in rice production is the highest decline in production compared to other sub-districts. One of the causes of the decline in rice production was due to a decrease in the harvested area which reached 4,196 ha. Other causes are thought to be due to land conversion and flooding. The allocation of working time in the household will affect production results, household income and expenditure which cause farmers to not be able to rely on their income only from rice farming.

In rice farming the role of women farmers is very important, especially in assisting in the allocation of labor both for their own farming and for renting out labor for other people's farming activities or as farm laborers. Working women farm workers cannot be separated from the amount of time they use. This is closely related to activities that help the family economy or provide for daily life. Furthermore, the involvement of women farm workers is required to be able to do the division of time.

Many factors cause women to work, including the age of the woman herself, if she is still of a productive age, she will devote her labor to work on other people's farms. The number of family dependents is also a factor for working women farmers. The wages received are the area of their own farming land that is worked on by the farmer's household. If the area of land cultivated is small, then the excess labor is used to work on other people's farms. Level of education of female farmers, experience in rice farming, and income of



farming families. If the income of the farmer's household is not sufficient for their consumption needs, then women farmers tend to work to help supplement the income of the farmer's household.

The purpose of this research:

- Analyzing the outpouring of female farm labor against the total allocation of labor in tidal swamp rice farming in Sungai Tabuk District, Banjar Regency;
- Analyzing farmer household income from on-farm, off-farm and non-farm in Sungai Tabuk District, Banjar Regency;
- Analyzing the influence of age, number of dependents, wages, land area, education, experience, family income and marital status on women farming work in rice farming in tidal swamp rice fields in Sungai Tabuk District, Banjar Regency.

METHODS OF RESEARCH

This study uses a survey method. This research was conducted in Sungai Tabuk District, Banjar Regency. The reason is that rice farming in this sub-district has a wider tidal area compared to other sub-districts. This research was conducted from April to November 2022.

In this study the data used is primary data. Primary data was obtained by direct observation at the research location and direct interviews with respondents using a list of questions that had been prepared according to the research objectives.

Analyzing the large outpouring of female farming labor against the total allocation of labor in tidal swamp rice farming using the formula:

$$HKO_{ji} = \frac{HK_i \times TK \times JK_i}{8}$$

Where: HKO_{ji} - people's working day; HK - working day (day); TK - workforce (people); JK - working hours (hours); j - female (w) and male (p); i - activities 1,2,3,4,5,6; 8 - maximum working hours of labor in 1 day.

Total outpouring of labor:

$$\sum HKO = \sum HKO_{wi} + \sum HKO_{pi}$$

The contribution of the outpouring of female farming labor to the total workforce in lowland rice farming:

$$P = \frac{\sum HKO_{wi}}{\sum HKO}$$

Where: P - the contribution of the outpouring of female farm workers to the total workforce in lowland rice farming (%); w_i - the number of female farm workers in paddy rice farming (HKO); $\sum HKO$ - total labor force in paddy rice farming (HKO).

Analyzing household income from on-farm, off-farm and non-farm, in detail as in the following description: Farming income (on-farm) consisting of rice and citrus farming and fishing business uses the following formula.

Explicit costs of farming:

$$TC_{ea} = \sum_{i=1}^n X_{i_a} \cdot P_{i_a}$$

Where: TC_{ea} - total explicit costs (IDR); X_i - use of the i -th production input (IDR); P_i - the price of the i -th production input (IDR); a - 1. lowland rice farming, 2. horticulture farming, 3. fishing business.



Farming acceptance:

$$TR_a = Q_a \times P_a$$

Where: TR - total revenue (IDR); Q - number of products produced (kg); P - selling price (IDR); a - 1. lowland rice farming, 2. horticulture farming, 3. fishing business.

Farm income:

$$I_{aonf} = TR_a - TC_{ea}$$

Where: I_{aonf} - farm of the a-th income (IDR); TR_a - the total revenue of a-th farm (IDR); TC_{ae} - total explicit cost of farming of the a-th (IDR); a - 1. lowland rice farming, 2. horticulture farming, 3. fishing business.

Total income from on-farm:

$$I_{onf} = \sum_1^3 I_{aonf}$$

Income from off-farm activities:

$$I_{zoff} = TK_{zoff} \times P_{zoff}$$

Where: I_{zoff} - income from the z-th off-farm activities (IDR); TK_{zoff} - the amount of labor outpouring for the z-th off-farm activities (HKO); P_{zoff} - wages for off-farm activity z-activity (IDR/HKO).

$$I_{zoff} = TR_{zoff} - TC_{ezoff}$$

Where: z - z type of off-farm business.

Total income from off-farm business:

$$I_{off} = \sum_1^z I_{zoff}$$

Income from non-farm activities:

$$I_{ynon} = TK_{ynon} \times P_{ynon}$$

Where: I_{ynon} - income from non-farm y-th activities (IDR); TK_{ynon} - the amount of labor outpouring for non-farm y-th activities (HKO); P_{ynon} - wages for non-farm activity y-th (IDR/HKO).

$$I_{ynon} = TR_{ynon} - TC_{eynon}$$

Where: I_{ynon} - non-farm income (take home pay) (IDR); TR_{non} - total non-farm revenue (IDR); TC_{non} - total non-farm explicit costs (IDR); y - type of non-farm y-th business.

Total income from non-farm business:

$$I_{non} = \sum_1^y I_{ynon}$$

Farmer household income from various businesses, namely on-farm, off-farm and non-farm:

$$I_{rt} = I_{on} + I_{off} + I_{non}$$



Analyzing the factors that influence the outpouring of female farm labor in rice farming activities in tidal swamp rice fields using multiple linear regression analysis with the formula:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8D_1 + \varepsilon_i$$

Where: Y - the outpouring of female agricultural labor in lowland rice farming (HKO); X_1 - the age of the female farmer (years); X_2 - number of dependents of a woman farmer's family (people); X_3 - wages of women farmers (IDR/HKO); X_4 - area of land cultivated by women farmers (ha); X_5 - education of women farmers (years); X_6 - experience in rice farming (years); X_7 - family income (IDR); D_1 - marital status of the female farmer ($d_1=1$ female farmer who is married, $d_1=0$ female farmer who is not married or is a widow); b_0 - constant coefficient; $b_1, b_2, b_3, b_4, b_5, b_6, b_7, b_8$: coefficient; ε_i - error.

The multicollinearity test is carried out by looking at the tolerance value and the variance of the inflation factor (VIF) in the regression model. Variables that cause multicollinearity can be seen from the tolerance value which is smaller than 0.1 or the VIF value which is greater than the value 10.

To detect heteroscedasticity can be used by looking at the scatter diagram (scatter plate). Heteroscedasticity occurs when the data distribution forms a certain pattern.

Furthermore, the regression model is carried out various analyzes namely:

$$R^2 = \frac{Kt_{regresi}}{Kt_{total}}$$

Hypothesis:

$$H_0 : b_1 = b_2 = b_3 = b_4 = b_5 = b_6 = b_7 = b_8 = 0$$

$$H_1 : \text{at least there is one } b_i \neq 0, i = 1, 2, \dots, 8$$

F Test Statistics:

$$F_{hit} = \frac{Kt_{regresi}}{Kt_{sisa}} = \frac{\sum \hat{y}_i^2 / k}{\sum \hat{e}_i^2 / n - k - 1}$$

Test criteria:

- If $F_{statis} > F_{table} (\alpha; n-k-1)$ then it is decided to reject the null hypothesis and accept H_1 , which means that the tested variable has a significant effect on the dependent variable;
- If $F_{statis} \leq F_{table} (\alpha; n-k-1)$ then it is decided that the null hypothesis (H_0) cannot be rejected, which means that simultaneously the independent variables have no significant effect on the dependent variable.

Test-t: $H_0 : b_i = 0$; $H_1 : b_i \neq 0$.

t test statistics:

$$t_{hit} = \frac{b_i}{Se(b_i)}$$

Where: b_i - the regression coefficient of the i-independent variable; $Se b_1$ - Standard error (Standard error) of the estimated regression coefficients.

Test criteria:

- If $t_{statis} > t_{table} (n-k-1 : \alpha/2)$ then it is decided to reject the null hypothesis and accept H_1 which means that the independent variable (X_i) has a significant effect on the dependent variable (Y);
- If $t_{statis} \leq t_{table} (n-k-1 : \alpha/2)$ then it is decided that the null hypothesis (H_0) cannot be rejected, which means that the independent variable (X_i) has no significant effect on the dependent variable (Y).



RESULTS AND DISCUSSION

Women farmers in the household play an active role in helping farming activities and earning a living in the agricultural and non-agricultural sub-sectors. The outpouring of working time on farming is the number of working hours spent by household members on farming. The time spent on farming is divided into the husband's work time and the wife's work time. Implementation of lowland rice farming includes nursery activities (seeding, seedling maintenance, removal of seedlings and tracking, maintenance of tracking), land preparation, removal of tracking and planting, maintenance (weeding, fertilizing and OPT control), harvesting, transportation and drying. Based on the results of the study, it showed that the role of female workers in cultivating local rice on tidal land was quite important with a large outpouring of female agricultural labor of 20.53 HKO or 39.84% of the total workforce which reached 51.72 HKO (Table 1). In other words, more than a third of the female farmer workforce plays a role in rice farming activities.

Table 1 – Contribution of female farm workers to the total workforce in rice farming

Description	Number of workers (HKO)	Percentage (%)
Outpouring of male labor	31,20	60,16
Outpouring of female workers	20,53	39,84
Total	51,72	100,00

Source: Primary data processing, 2022.

In accordance with the concept of farm household income which consists of various sources of income, namely consisting of the results of various farming activities or what is called (on-farm), income outside of farming, namely in the form of renting out labor for farming activities, processing of agricultural-based products and income from non-farm business, such as carpenters, construction workers. Farming income is the difference between receipts and explicit costs or costs actually incurred.

Based on the above concept, the amount of farmer household income originating from rice and orange farming reached IDR 23,415,574 per farm (Table 2) with an average rice farming area of 0.96 ha and oranges with an area of 0.091 ha. Of this amount, the contribution of rice farming per farm is very large, reaching 81.39% of the total rice farmer household income. Meanwhile, the contribution of income from citrus farming per farm is relatively small, only reaching 18.61% of the total rice farmer household income.

Table 2 – Average income of on-farm activities

Description	Per farm (IDR)	Per hectare (Rp)
Average rice income	19.059.480	19.771.245
Average orange revenue	4.356.094	48.045.153
Total revenue	23.415.574	67.816.398

Source: Primary data processing, 2022.

The main occupation is workers who are focused on or prioritized by farmers, namely paddy rice and citrus farming in tidal swamps as a source of household income. In addition, to obtain additional income, farmers do routine side jobs in their spare time, farmers can do this work. These jobs are farm laborers and fishermen (capture fisheries). This work includes off-farm activities. Based on the research results, the income of farmers in this off-farm activity is the work of farmers as farm laborers and fishermen with an average income of IDR 390,400/month or IDR 4,684,800/year. Farm workers can be interpreted as people who work for the land owner and get wages both daily and weekly depending on what has been agreed upon by both parties. Farm workers are laborers who are bound by a daily work relationship and receive wages according to the number of days worked, or the hours worked or the type of work provided. In general, agricultural laborers are laborers who do work that are not continuous but seasonal in nature.

In this study, the farm workers referred to are freelance workers in agriculture because they only work in the agricultural sector. So they are more precisely said to be farm laborers.



Farm workers in the real sense earn income primarily from work that collects wages for landowners or land tenant farmers. The activities carried out by farm laborers are generally in the research area, namely land preparation activities using traditional tools in the form of plows, planting and harvesting activities (harvesting rice using sickles). Most of them are on a short term basis, hired and released day by day.

As for other farmer activities that are carried out as fishermen or who usually do capture fisheries. Capture fisheries is an effort/activity that involves the exploitation of a resource in public waters. Fishing business is an activity of fishermen to meet the needs of life and the economy by utilizing aquatic biological resources with the aim of making a profit. Fishing business activities are related to business principles in general, everything that is needed is carefully considered between the costs incurred and the revenues obtained in order to make a profit. In this study the fishermen in question are capture fisheries activities carried out in public waters. The fish obtained from capture fisheries activities are *papuyu* fish, sepat and snakehead fish, some of which are for sale and for daily consumption.

To obtain additional income, farmers also do other side jobs that can be done in their free time. The job is as a builder and trade. This work includes non-farm activities. Non-farm activities are businesses outside agriculture and are completely unrelated to agricultural activities. Based on the results of the research, the income of farmers in non-farm activities is as construction workers and trading, the average income earned is IDR 332,000/month or IDR 3,984,000/year. In this study, trading means stalls where small trades are held, selling cakes, drinking coffee and tea, cigarettes and groceries on a small scale. What is meant by the work of a builder is a builder who repairs houses or builds houses in the village or outside the village.

Table 3 – Total income of farmer households from various activities

Description	Per year (IDR)	Percentage (%)
On-farm activities (IDR/farming)	23.415.574	72,98
Off-farm activities	4.684.800	14,60
Non-farm activities	3.984.000	12,42
Total revenue	32.084.374	100,00

Source: Primary data processing, 2022.

Based on Table 3, it shows that the total household income of rice paddy farmers on tidal land in Banjar Regency is IDR 32,084,374/year. The biggest source of income comes from rice farming and citrus farming (on farm) which account for 72.98% of the total income of farmer households, or IDR 23,415,574 per farm per year. Meanwhile, income from off-farm and non-farm sources was relatively small, only 14.60% and 12.42%, respectively, or IDR 4,684,800/year and IDR 3,984,000/year. This shows that rice and orange farming is the main livelihood for farming households in Banjar Regency.

Based on the results of the estimation of the factors that influence the outpouring of female farming labor in lowland rice farming activities with a regression analysis of the Cobb-Douglas function type model can be seen in Table 4.

Table 4 – The results of the regression analysis of the factors that influence the outpouring of female farm labor in paddy rice farming activities

Model	Unstandardized Coefficients		t	Sig.	Collinearity Statistics	
	B	Std. Error			Tolerance	VIF
Outpouring of Kindergarten Women Farmers (Y)	1,295	1,698	0,763	0,450		
Age of female farmer (X ₁)	-0,286	0,162	-1,763	0,085*	0,326	3,069
Number of dependents (X ₂)	0,106	0,047	2,278	0,028**	0,766	1,305
Wages of farm women (X ₃)	0,152	0,056	2,728	0,009***	0,771	1,297
Arable land area (X ₄)	0,652	0,069	9,439	0,000***	0,702	1,425
Farmer women education (X ₅)	0,203	0,072	2,836	0,007***	0,600	1,666
Experience in rice farming (X ₆)	-0,108	0,048	-2,240	0,031**	0,542	1,845
Family income (X ₇)	0,099	0,058	1,715	0,094*	0,519	1,926
Marital status (D ₁)	0,025	0,027	0,919	0,364	0,585	1,708

R^2 -Adjusted = 0,787 ; F_{hit} = 23,690; p = 0,000

Description: * significant at $\alpha < 0,1$; ** significant at $\alpha < 0,05$; *** significant at $\alpha < 0,01$.

Source: Primary data processing, 2022.



Multicollinearity is a condition where there is a perfect or near perfect linear relationship between two or more independent variables in the regression model. A good regression model requires no multicollinearity problems. One way to detect the presence or absence of multicollinearity is by looking at the Tolerance and Variance Inflation Factor (VIF) values. Based on the results of the research on the factors that influence the outpouring of female farming labor in lowland rice farming activities, it shows that the model does not have multicollinearity between the variables. This can be seen from the Variance Inflation Factor (VIF) value for each variable which is relatively smaller below 10 and the Tolerance value is large than 0.10 (Table 4).

Based on the results of the regression analysis, the value of the coefficient of determination (R^2 -adjusted) is 0.787 (Table 4). This shows that the high and low outpouring of female farmer labor in paddy rice farming activities of 78.7% is determined by the independent variables (age of the female farmer, number of dependents of the female farmer's family, wages of the female farmer, area of land cultivated by the female farmer, level of education of female farmers, level of experience in rice farming, family income and marital status of female farmers) in this function, while the remaining 21.3% is determined by other variables not included in the function model.

For the F test it is known that the Fhit value (23.690) with a probability value of 0.000 < 0.01 ($\alpha = 1\%$) means that the hypothesis H_0 is rejected and H_1 is accepted (Table 4). This shows that the age of the female farmer (X_1), the number of dependents of the female farmer (X_2), the wage of the female farmer (X_3), the area of land cultivated by the female farmer (X_4), the level of education of the female farmer (X_5), the level of experience in rice farming (X_6), family income (X_7) and the marital status of female farmers (D_1) together have a significant effect on the labor force of female farmers in paddy rice farming activities (Y).

In the regression equation of a study, the coefficient value of each variable is the variable age of the woman farmer (X_1), the number of dependents of the woman farmer's family (X_2), the wage of the woman farmer (X_3), the area of land cultivated by the woman farmer (X_4), the level of education farming women (X_5), level of experience in rice farming (X_6), family income (X_7) and marital status of farming women (D_1) must be tested by t test. This aims to determine which independent variables have a significant influence on the dependent variable, namely the labor force of female farmers in paddy rice farming activities (Y). Based on the results of the t test (partial test), the factors that significantly influence the outpouring of female farmer labor in lowland rice farming activities, namely the age of the female farmer, the number of dependents of the female farmer's family, the wage of the female farmer, the area of land cultivated by the female farmer, the level education of female farmers, level of experience in rice farming and family income.

Based on the results of the regression analysis, a coefficient of 0.286 was obtained and it was negative, significantly different from zero at $\alpha = 10\%$, so that the H_0 hypothesis was rejected and the alternative hypothesis H_1 was accepted. This means that the age of the female farmer has a significant effect on the amount of outpouring of female farmer labor in paddy rice farming activities. In other words, if the age of female farmers increases by 1%, the total outpouring of female labor in lowland rice farming decreases by 0.286%. The age of the farmer is very influential on a farm that is carried out both physically and biologically, because a good and strong physique and extensive knowledge are very helpful in farming. In general, age is a factor that greatly influences one's work ability and way of thinking and acting, especially in terms of decision making. Age also affects the ability of farmers to manage farming in the development of technology applications. Initially, the older a person is, the higher his working time will be, but then at a certain age, his working time will decrease. In line with the decreasing physical strength as well. The age of the female farmer affects the outpouring of working hours of the female farmer in activities in the agricultural sector, where the younger the female farmer, the greater the number of working hours that the female farmer devotes to various productive jobs. Young peasant women will be relatively more dynamic and agile compared to old peasant women who have begun to be attacked by old age.

Based on the results of the regression analysis, the factor of the number of family



dependents obtained a coefficient of 0.106 and a positive sign, significantly different from zero at $\alpha = 5\%$, so that the H_0 hypothesis was rejected and the alternative hypothesis H_1 was accepted. This means that the number of family dependents has a significant effect on the amount of outpouring of female farming labor in paddy rice farming activities. In other words, if the number of family dependents increases by 1%, the total outpouring of female labor in lowland rice farming increases by 0.106%. The large number of unemployed household members encourages housewives to devote more and more of their energy to activities that can provide additional income. This is because meeting the needs of family members will be borne by a productive workforce accompanied by increasing family needs. Time spent that the families of women farmers whose living costs are relatively higher than their income, for example because the number of family dependents is relatively large, the family tends to increase the number of family members to work. In this regard, the outpouring of a household's working time will increase so that its income will also increase.

Based on the results of the regression analysis, the wage factor for women farmers obtained a coefficient of 0.152 and a positive sign, significantly different from the null hypothesis at $\alpha = 1\%$, so that the H_0 hypothesis was rejected and the alternative hypothesis H_1 was accepted. This means that the wages of female farmers significantly influence the amount of outpouring of female agricultural labor in paddy rice farming activities. In other words, if the wages of female farmers increase by 1%, the total outpouring of female labor in paddy rice farming increases by 0.152%. The results of this study indicate that the wage rate variable has a significant influence on the variable of women's working time. If the wages of women farmers increase, the amount of time women work increases. Because women farmers will tend to increase their working time if the wage rate offered increases. In the theory of time accumulation, it is said that an increase in wages means an increase in income. An increase in the wages of women farmers tends to reduce the input of time in production and household consumption and increases the amount of time women farmers' work.

Based on the results of the regression analysis, the factor of arable land area obtained a coefficient of 0.652 and a positive sign, significantly different from the null hypothesis at $\alpha = 1\%$, so that the hypothesis H_0 is rejected and the alternative hypothesis H_1 is accepted. This means that the area of arable land has a significant effect on the amount of outpouring of female farming labor in lowland rice farming activities. In other words, if the arable land area increases by 1%, the total outpouring of female labor in lowland rice farming increases by 0.652%. Land area has a significant effect on the variable time spent working women farmers in paddy rice farming. So, the reality on the ground shows that if the area of land worked on by women farmers is wider, the outpouring of working time will increase. Because women farmers tend to increase their working time if the area of land they cultivate is wider. The outpouring of time stated that the size of production from farming was influenced, among other things, by the narrow area of land used. The wider the agricultural land, the more inefficient the land is due to weak supervision of the use of production factors, limited labor supply, and limited capital stock. Conversely, with a narrow area of land, efforts to control the use of production factors are getting better, the use of labor is sufficient, and the required capital is not too large.

Based on the results of the regression analysis, the factor of the education level of farming women obtained a coefficient of 0.203 and a positive sign, significantly different from the null hypothesis at $\alpha = 1\%$, so that the H_0 hypothesis was rejected and the alternative hypothesis H_1 was accepted. This means that the level of education of female farmers has a significant effect on the amount of outpouring of female agricultural labor in paddy rice farming activities. In other words, if the education level of female farmers increases by 1%, the total outpouring of female labor in paddy rice farming increases by 0.203%. The level of education greatly influences the farmer's mindset in making decisions, the higher the level of education, the faster and more precise the decision making. The relatively high level of farmer education causes a farmer to be more responsive in absorbing various adoptions, especially in the implementation of his farming business. The outpouring of time is said that the higher a person's level of education, the more capable he will be of capturing better



economic opportunities around him. And with higher education it will also improve the quality of work while increasing productivity.

Based on the results of the regression analysis, the long experience factor of rice farming obtained a coefficient of 0.108 and a negative sign, significantly different from the null hypothesis at $\alpha = 5\%$, so that the H_0 hypothesis was rejected and the alternative hypothesis H_1 was accepted. This means that the length of rice farming experience has a significant effect on the amount of outpouring of female farming labor in lowland rice farming activities. In other words, if the length of experience in rice farming increases by 1%, the total outpouring of female labor in lowland rice farming decreases by 0.108%. Farming experience influences the behavior of farmers in managing their business. Usually farmers have longer farming experience and a lot of knowledge in farming so they tend to be careful in making decisions. The length of farming is related to the experience of farming. The longer the farming, the more farming experience gained. A lot of farming experience will make a positive contribution to the ability of farmers to overcome the various farming problems they face. The duration of farming is the length of time that women farmers have lived in carrying out their farming activities on paddy rice. Usually calculated since starting to carry out farming activities until the time the research takes place. The duration of farming will be an important consideration in the outpouring of labor needed by women farmers to complete their farming activities. The longer the farming time, the less labor required. On the other hand, the fewer female farmers working on the farm, the more labor required.

Based on the results of the regression analysis, the family income factor obtained a coefficient of 0.099 and a positive sign, significantly different from the null hypothesis at $\alpha = 10\%$, so that the H_0 hypothesis was rejected and the alternative hypothesis H_1 was accepted. This means that family income has a significant effect on the amount of outpouring of female farming labor in paddy rice farming activities. In other words, if family income increases by 1%, then the amount of female labor in lowland rice farming increases by 0.099%. Income is the main thing for family life in an effort to meet the needs of life. The size of the family income will determine the level of prosperity of the family. The income of a family will depend on the productive work activities of the head of the family. Family income in the study area comes from on-farm activities (rice and citrus farming), off-farm (farming laborers and fishermen) and non-farm activities (builders and trading). The average total income of a female farmer's family is IDR 32,084,374/year. The size of the income will affect the socio-economic conditions of farmers. The higher the farmer's income, the better all his household needs can be met. In addition, the level of income will also determine the position of social status of farmers in society.

Based on the results of the regression analysis, the marital status factor obtained a coefficient of 0.025 and a positive sign, significantly the same as the null hypothesis at $\alpha = 10\%$, so that the H_1 hypothesis was rejected and the H_0 hypothesis was accepted. This means that marital status does not significantly influence the amount of outpouring of female farming labor in paddy rice farming activities. Based on the research results, the number of female farm women who are married is 52%, while the remaining 48% of female farm women respondents are widows. hours for married women in the same labor market because married women have children and are responsible for their care. The marital status variable has a significant influence on the working time variable of farming women in paddy rice farming. This reflects that if the female farmer is married then she tends to have a lower working time outpouring than the female farmer who is not married or is a widow. Therefore, in accordance with the reality on the ground, women farmers will tend to increase their working time if the status of women farmers is single or widowed compared to women farmers who are married.

CONCLUSION

Based on the results and discussion that has been described, several conclusions are obtained, namely:

- The outpouring of women farming labor is 20.53 HKO or 39.84% of the total



workforce in rice farming which amounts to 51.78 HKO/farm;

- The total income of rice farming households on tidal land in Banjar Regency is IDR 32,084,374/year, consisting of rice farming and orange farming (on farm) income of 72.98% of the total income of farmer households, or IDR 23,415 .574 per farm per year. Income from off-farm and non-farm sources respectively amounted to 14.60% and 12.42% or IDR 4,684,800/year and IDR 3,984,000/year;
- Factors that significantly influence the outpouring of female farm labor in lowland rice farming activities, namely the age of the female farmer, the number of dependents of the female farmer's family, the wages of the female farmer, the area of land cultivated by the female farmer, the level of education of the female farmer, the level of experience in rice farming and family income. While the variable that has no significant effect is the marital status of farmer women.

Recommendations:

- To increase household income, it is necessary to diversify in farming besides being able to increase work in farming, it can also increase family income. For this reason, capital assistance or credit assistance is needed to facilitate farmer households in procuring production facilities as business capital for farming activities;
- The need for programs that can be recommended for women farmers is training in practical skills in the field of farming, farming management, in addition to other informal education so that women farmers can streamline the effectiveness and efficiency of the outpouring of labor for on-farm, off-farm and non-farm activities to support increase in family income.

REFERENCES

1. Andriati. 2003. Perilaku Rumahtangga Petani Padi dalam Kegiatan Ekonomi di Jawa Barat. [Tesis]. Program Pascasarjana, Institut Pertanian Bogor, Bogor.
2. Badan Pusat Statistik. 2021. Provinsi Kalimantan Selatan Dalam Angka. BPS. Banjarbaru.
3. Badan Pusat Statistik. 2021. Kabupaten Banjar Dalam Angka. BPS. Martapura.
4. Becker, G.S. 1985. Human Capital, Effort and The Sexual Division of Labor. Proc. of the Trend in Women's Work, Education, and Family Building. Journal of Labor Economics, 3(2): 33-58.
5. Ellis, F. 1988. Peasant dalam Peasant Economics. Farm Households and Agrarian Development. Cambridge University Press. Cambridge.
6. Fahmi, F. N. 2009. Analisis Curahan Kerja Rumahtangga Petani Lahan Sawah di Kabupaten Donggala Provinsi Sulawesi Tengah. [Tesis]. Program Pascasarjana, Institut Pertanian Bogor.
7. Gujarati, D. 2006. Ekonometrika Dasar. Erlangga. Jakarta.
8. Mangkuprawira, S. 1985. Alokasi Waktu dan Kontribusi Kerja Anggota Keluarga dalam Kegiatan Kegiatan Ekonomi Rumahtangga: Studi Kasus di Dua Tipe Desa di Kabupaten Sukabumi di Jawa Barat. [Disertasi]. Program Pascasarjana, Institut Pertanian Bogor, Bogor.
9. Ongge, J. K. 2001. Analisis Curahan Kerja Wanita dan Kontribusinya Terhadap Pendapatan Rumahtangga Petani di Kabupaten Jayawijaya- Irian Jaya. Program Pascasarjana, Institut Pertanian Bogor.
10. Soepriati. 2006. Peranan Produksi Usahatani dan Gender Dalam Ekonomi Rumahtangga Petani Lahan Sawah: Studi Kasus di Kabupaten Bogor. [Tesis] Magister Sains. Sekolah Pascasarjana, Institut Pertanian Bogor, Bogor.
11. Standing, G. 1978. Labor Force Participation and Development. International Labor Organization, Geneva.
12. Sumaryanto. 1989. Penawaran Tenaga Kerja pada Usaha Tani Padi dan Faktor-Faktor yang Mempengaruhi Perubahannya. [Tesis]. Program Pascasarjana, Institut Pertanian Bogor, Bogor.