

Research Article

Arif Irawan^{1*}, Dr. Dedy Yuliawan, S.E., M.Si²

Factors that Women Consider When Choosing to Work (Case Study of the Salted Fish Processing Industry on Pasaran Island, Bandar Lampung)

*Corresponding Author: **Arif Irawan**; University of Lampung, Indonesia; contact.arifirawan@gmail.com

Dr. Dedy Yuliawan, S.E., M.Si; University of Lampung, Indonesia; dedy.yuliawan@feb.unila.ac.id

Received: June 1, 2024; Accepted: June 6, 2024; Online: June 10, 2024 | DOI: <https://doi.org/10.47353/ijema.v2i1.142>

Abstract: *The workforce in the salted fish processing industry in Pulau Pasaran Tourism Village is predominantly composed of women, particularly housewives. This industry was selected for the study due to that it has the highest number of female workers in Bandarlampung City. The objective of this study is to analyze the impact of husbands' income, workers' wages/salaries, and the number of dependents on the contribution of female workers in Pulau Pasaran. The population of the study includes female workers employed in the salted fish processing industry and living in Telukbetung Timur, Bandarlampung. The sample was taken using purposive sampling technique, consisting of a total of 37 female workers as respondents. Data were collected through observation, questionnaires, and documentation, and analyzed using descriptive quantitative methods. The results of the study indicate that family or husbands' income, wages/salaries, and the number of dependents significantly influence the contribution of female workers in the salted fish processing industry in Pulau Pasaran. This study reveals that female workers in this industry play a crucial role in increasing family income.*

Keywords: *female workers, family income, female workers' wages, number of dependents.*

Introduction

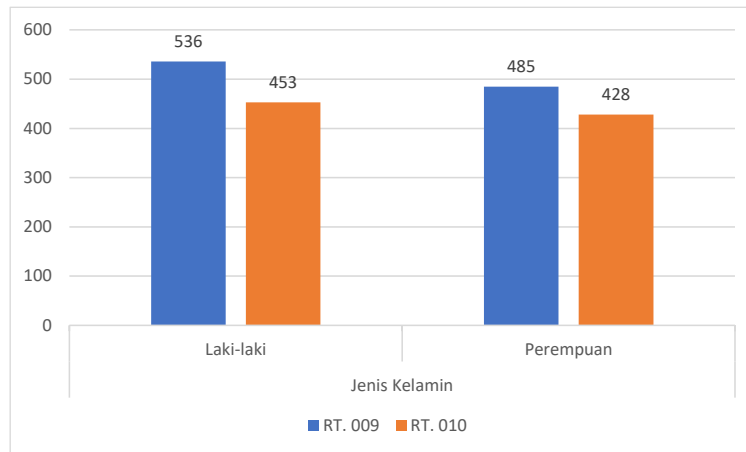
The Indonesian government continues to face challenges in dealing with poverty. According to BPS data for September 2022, the number of poor people reached 26.36 million people (9.57%), up 0.20 million from March 2022, but down 0.14 million from September 2021. To overcome poverty, the government is implementing various programs, including increasing productivity through the development of the industrial sector, which aims to improve living standards, create new jobs and reduce unemployment.

The MSME sector plays an important role in reducing poverty and improving the economy of the community, especially women. According to Kadeni & Srijani (2020), the industrial sector is significant to the national economy, providing economic benefits through increasing added value, creating jobs and foreign exchange.

Lampung Province's economy in 2023 will grow by 4.55 percent, stronger than in 2022 which will grow by 4.28 percent. In terms of production, the highest growth occurred in the Transportation and Warehousing business sector which grew by 16.66 percent (BPS, 2024). Bandar Lampung City, the capital of Lampung Province, functions as the center of government, social, political, educational, cultural and economic activities. Its strategic location as an economic route between Sumatra Island and Java Island supports its growth as a center for trade, industry and tourism.

Pasaran Island, designated as a tourist village by the Ministry of Tourism and Creative Economy (Kemenparekraf), is located in Kota Karang Village, East Telukbetung District, Bandar Lampung City. Since the 1960s, Pasaran Island has been known as the center of the salted fish processing industry, producing products such as anchovies, jengki anchovies, jumbo anchovies, buntiaw anchovies and squid. This 13 hectare island is inhabited by around 1,900 residents or 342 heads of families divided into two RTs, namely RT 009 and RT 010. The residents are members of several community groups, including five groups

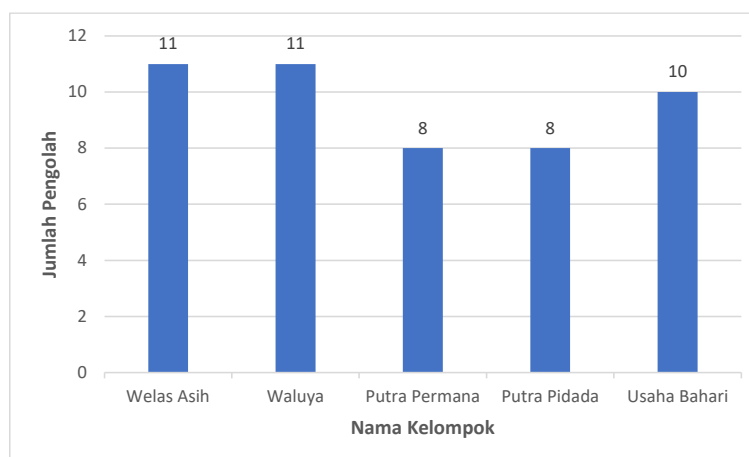
of salted fish processors, two groups of crab fishermen, two groups of fish farmers. , and 10 groups of green mussel cultivators.



Graph 1. Population of Pasaran Island 2023

Source: Primary Data (2023)

The salted fish processing industry involves processing anchovies into salted fish through salting and drying processes. Several types of preserved fish include snapper, mackerel, tuna, mackerel, kite, anchovies, petek, and tilapia (Antoni, 2010). This industry is important for creating jobs and reducing unemployment. On Pasaran Island, around 765 people work in the salted fish processing industry, the majority of whom are housewives from around East Telukbetung District. Average production reaches 3 tons per month per processor, with total production of around 120-150 tons per month or 1,140 tons per year. Apart from fish processing, Pasaran Island has a shipbuilding industry and floating cages for cultivating green mussels and fish. This activity has significant economic value. Pasaran Island is also a tourist destination, offering fishing routes and visits to tourist islands in Lampung Province, as well as beautiful sunset views around the connecting bridge.

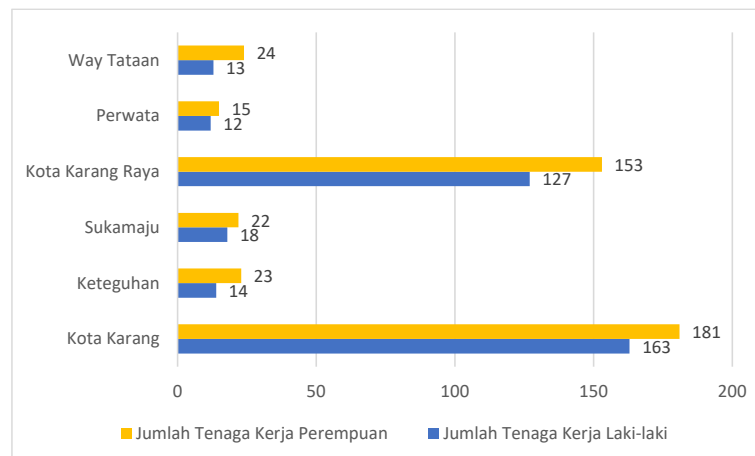


Graph 2. List of Salted Fish Industry Processing Groups on Pasaran Island

Source: Pasaran Island Profile (2021)

Based on data from Graph 1, Salted Anchovy MSMEs on Pasaran Island consist of 48 processors who are members of 5 groups: Welas Asih, Waluya, Putra Permana, Putra Pidada, and Usaha Bahari. This

grouping started in 2010 with facilitation from Bank Indonesia. Each group consists of 8–11 members with an average productivity of 200–500 kg per production, which lasts 20–23 days per month depending on the availability of raw materials. Salted Anchovy UMKM on Pasaran Island produces various types of salted fish such as anchovies, buntiauw and jengki. Rice anchovies or Medan anchovies have the highest selling value, while jengki anchovies have a lower price.



Graph 3. Number of Workers in the Salted Fish Processing Industry on Pasaran Island by Subdistrict by Gender

Source: Pasaran Island Profile (2023)

Based on data from Graph 3, the salted fish processing industry on Pasaran Island has 765 workers, consisting of 347 men and 418 women. Kota Karang subdistrict has the largest number of workers with 344 people (163 men and 181 women), followed by Kota Karang Raya subdistrict with 280 workers (127 men and 153 women). Sukamaju, Keteguhan, Way Tataan, and Perwata subdistricts each have around 37–40 workers with more women. The majority of workers in this industry are women.

Based on the background that has been explained, research regarding the contribution of women in the salted fish processing industry is considered very interesting. Therefore, this research was conducted with the aim of providing ideas that can support the development of the salted fish processing industry on Pasaran Island.

Method

Types of Research and Data Sources

This research uses descriptive quantitative methods, with a focus on analysis of numerical data processed using statistics. This method helps determine the significance of differences between groups or relationships between the variables studied. The data used includes the husband's income level, number of dependents, and wage level. The data used consists of primary and secondary data. Primary data is obtained directly from original sources, including individual or group opinions, observation results, events, activities and test results. Secondary data is taken from existing sources such as books, articles and previous research reports. This research was conducted in the salted fish processing industry on Pasaran Island, East Telukbetung District, Bandar Lampung City.

Data analysis method

1. To determine the factors that influence the contribution of women working in the Pasaran Island salted fish processing industry, use the following equation:

a. Functional Model

$$TKP = f(PS, JT, UP)$$

b. Structural Model

$$\text{Crime scene} = \beta_0 + \beta_1 UP + \beta_2 JT - \beta_3 PS + \mu_t$$

Where:

Crime scene = Female Labor (long working time)

β_i = Constant

PS = PHusband's income

J.T = Number of Dependents

UP = Workers' Wages

μ_t = Error Term

1. Classic assumption test

a. Normality test

Classical linear regression assumes that the residual noise distribution has a mean equal to zero, is uncorrelated, and has a constant variance. The normality test is needed to ensure that the error term and independent and dependent variables are distributed normally. The methods used to check the normality of the residual distribution include the Jarque-Bera Test (JB Test) and graphic methods. In the JB Test, skewness and kurtosis values are calculated (Gujarati, 2010).

b. Heteroscedasticity Test

In multiple linear regression, one of the important assumptions to ensure that the model parameter estimates are BLUE (Best Linear Unbiased Estimators) is that the variance of the error must be constant (homoscedasticity). Heteroscedasticity often occurs in cross section data, where the variation in error is not constant. If heteroscedasticity is detected in the model, this can make the model inefficient even though it is still unbiased and consistent. In other words, carrying out regression under conditions of heteroscedasticity can produce wrong conclusions (misleading) (Gujarati, 2010).

c. Multicollinearity Test

Multicollinearity is a linear relationship between independent variables. Multicollinearity testing is carried out by calculating the Variance Inflation Factor (VIF) from the estimation results. If $VIF < 5$, there is no multicollinearity between independent variables. (Gujarati, 2004).

d. Autocorrelation Test

The autocorrelation test aims to detect correlation between members of a series of observations ordered by time or space, which means the results in one year can be influenced by the previous or next year. Autocorrelation can be detected using the Durbin-Watson statistical test (Gujarati, 1995). This test aims to identify whether or not there is correlation between times.

2. Statistical Hypothesis Testing

a. Test – t

This statistical test evaluates the influence of each independent variable on the dependent variable by comparing the calculated t with the t-table. The hypothesis tested is

$H_0 : = 0$ the independent variable has no significant effect on the dependent variable. β_i

$H_a : \neq 0$ the independent variable has an effect on the dependent variable. β_i

If H_0 is rejected, the independent variable has a significant effect on the dependent variable. If H_0 is accepted, the independent variable has no significant effect on the dependent variable (Gujarati, 2010).

b. Test – F

The F-test, also known as a concurrent test, model test, or ANOVA test, is used to assess the overall effect of an independent variable on a dependent variable and to determine the significance of a regression model. The F-test is carried out by comparing F-count with F-table (Gujarati, 2010).

Results and Discussion

A. Results

1. Data Analysis Results

a. Simple Least Quadrant Regression (OLS)

Table 1. Simple Least Squares (OLS) Regression Test Results

Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	16.29997	5.76974	1.48688	0.0033
Wages	0.000106	0.00001	4.014175	0.0000
The number of dependents	6.25082	1.61388	2.038508	0.0001
Husband's Income	-0.00000401	0.00000142	-1.488066	0.0033
R-squared 0.461052		Durbin-Watson stat		0.90376
Adjusted R-squared 0.458085		F-statistic		81,798

Source: Data processed using Eviews 9.0 (2024)

Based on table 1, the OLS model is expressed as: $TKP = 16.29997 + 0.000106 (UP) + 6.25082 (JT) - 0.0000401 (PS)$. The explanation of this equation is:

1. The constant coefficient shows that if all independent variables are zero, the length of time women work is 16,29997 hours per month.
2. The wage coefficient (UP) has a positive and significant effect on the length of time women work (TKP) at a significant level of $\alpha = 5\%$. Every increase in wages of IDR 10,000, with other variables constant, increases the length of time women work by 1.06 hours per month.
3. The coefficient of the number of dependents (JT) has a positive and significant effect on the length of time women work (TKP) at a significant level of $\alpha = 5\%$. Each addition of one family dependent, with other variables constant, increases the length of time women work by 6,25082 hours per month.
4. The husband's income coefficient (PS) has a negative and significant effect on women's working time (TKP) at a significant level of $\alpha = 5\%$. Every increase in husband's income of IDR 10,000, with other variables constant, reduces the length of time women work by 0,401 hours per month.

2. Classical Assumption Testing

a. Normality test

Table 2. Normality Test

Jarque-Bera Value	Critical Value $\alpha = 5\%$	Conclusion
0.30038	0.05	Normally Distributed Residuals

Source: Data processed using Eviews 9.0 (2024)

The statistical test results show that the data is normally distributed, with a Jarque-Bera probability value of 0.30038 which is greater than $\alpha = 0.05$. The Jarque-Bera test checks for skewness and kurtosis to confirm normal distribution. Because the p-value is greater than the significance level, the null hypothesis which states that the data is normally distributed is accepted. This ensures that the normality assumptions in linear regression are met, so that statistical analysis becomes more accurate and reliable.

b. Heteroscedasticity Test

Table 3. Heteroscedasticity Test

Obs*R-Squared	Chi-Square table	Conclusion
4.164004	2,943	There is no heteroscedasticity

Source: Data processed using Eviews 9.0 (2024)

Based on table 3, it can be concluded that there is no heteroscedasticity problem in the regression model. Heteroscedasticity occurs when the residual error variance is not constant, which can reduce estimation efficiency. The statistical test shows that the Obs*R-squared value is 4.164004, which is greater than the Chi-Square table value of 2.943. This means that the residual variance is constant and there is no heteroscedasticity in H_0 , so H_0 is accepted. Thus, the regression model is considered efficient and the analysis results are valid and accurate.

c. Multicollinearity Test

Table 4. Multicollinearity Test

Variables	Coefficient of Variance	Uncentered VIF	Centered VIF
C	63.2507	16.50956	NA
UP	0.000000000360	17.36303	1.169216
J.T	4.948745	18.84053	1.429054
PS	0.0000000000382	3.19937	0.812111

Source: Data processed using Eviews 9.0 (2024)

Based on Table 4 above, the regression model does not contain multicollinearity. Based on the test results using the Variance Inflation Factor (VIF), the independent variable shows a VIF value < 10 . Thus, it can be concluded that there is no multicollinearity problem or linear relationship between the independent variables.

d. Autocorrelation Test**Table 5. Autocorrelation Test**

Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	16.29997	5.76974	1.48688	0.0033
UP	0.000106	0.00001	4.014175	0.0000
J.T	6.25082	1.61388	2.038508	0.0001
PS	-0.00000401	0.00000142	-1.488066	0.0033
R-squared 0.461052		Durbin-Watson stat		0.90389
Adjusted R-squared 0.458085		F-statistic		81.7985

Source: Data Processed using Eviews 9.0 (2024)

Based on Table 5, the Durbin-Watson value is 0.90389, while $dk = 2$ with a total of $n = 37$, then $dL = 0.8024$, $dU = 0.8963$ and $4 - dU = 1.2091$, then $dU (0.8963) < DW (0.90389) < 4 - dU (1.2091)$ thus H_0 is accepted, it is stated that there is no positive or negative autocorrelation.

3. Statistical Hypothesis Testing**a. Test – t (Partial)****Table 6. Autocorrelation Test**

Variables	t-Statistics	t-Table	Prob.	Information
UP	4.0141753	1.05083	0.0000	H_0 is rejected
J.T	2.0385079	1.05083	0.0001	H_0 is rejected
PS	-1.4880658	-1.05083	0.0033	H_0 is rejected

Source: Data Processed using Eviews 9.0 (2024)

a. The influence of wages on the length of time female workers work.

Based on Table 6, the t-statistical value of the wage variable is 4.0141753, while the t-table value is 1.05083. Because the t-statistic value is greater than the t-table, H_0 is rejected and H_a is accepted, which means that wages partially have a significant effect on the length of time women work.

b. The influence of the number of dependents on the length of time women work.

Based on Table 6, the t-statistic value for the variable number of dependents is 2.0385079, while the t-table value is 1.05083. Because the t-statistic value is greater than the t-table, H_0 is rejected and H_a is accepted, which means that the number of dependents partially has a significant effect on the length of time women work.

c. The influence of husband's income on the length of time women work.

Based on Table 6, the t-statistical value of the husband's income variable is -1.4880658, while the t-table value is -1.05083. Because the t-statistic value is greater than the t-table, H_0 is rejected and H_a is accepted, which means that income partially has a significant effect on the length of time women work.

b. Test – F

The F-test is carried out to find out what the influence of all independent variables simultaneously has on the dependent variable. This test was carried out based on a 95% confidence level ($\alpha = 0.05$) with degrees of freedom $df_1 = k$ and $df_2 = nk - 1$ ($n =$ number of observations, $k =$ number of independent variables). So the F-statistics result is 81.7985 and the F-table value is 2.15. This means that the F-statistic

value is $>$ from F-table, so H_0 is rejected and H_a is accepted. This means that the variables that have been tested as a whole have an effect on the dependent variable.

B. Discussion

1. The Influence of Wages on the Contribution of Working Women

Research shows that wages or salaries have a positive and significant effect on women's contributions to work. Many women work because of the high wages they receive. The higher the wages, the more female workers choose to work, and the number of hours worked affects the amount of wages received. Research by Norma (2019) also shows that the wages of female workers have a positive effect on the level of contribution of working women in Mergo Mulyo Village; Increasing wages will increase women's contribution to work.

2. The Influence of the Number of Dependents on the Contribution of Working Women

Research shows that the number of dependents has a positive and significant influence on women's contribution to work. The more family members there are to support, the more women choose to work. On average, female workers in the salted fish processing industry in Pulau Pasaran Tourism Village work because they have many family responsibilities.

3. The Influence of Husband's Income on the Contribution of Working Women

Research shows that husband's or family income has a positive and significant influence on women's contribution to work. Many women choose to work because their husband's or family's income is low. On average, female workers in the salted fish processing industry in Pulau Pasaran Tourism Village work because their husband's or family's income is low. Family income plays an important role in women's decision to work. Sumarsono (2003) explains that families with high incomes tend to reduce the number of members who work, while families with high costs of living tend to increase the number of members who work. In other words, when family income is insufficient, more family members look for work.

Conclusion

Based on the test results using the Ordinary Least Square (OLS) method and the discussion that has been carried out, it can be concluded that:

1. The variable wages for female workers has a positive and significant influence on the length of time women work,
2. The variable number of dependents has a positive and significant effect on the length of time women work, and
3. The husband's income variable also has a positive and significant effect on the length of time women work.

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