ANALYSIS OF THE WELFARE OF TOBACCO FARMERS IN BANARAN VILLAGE, TEMBARAK DISTRICT, TEMANGGUNG REGENCY

Maman Faudzi[1*], Rifki Khoirudin[2], Hasna Laili Nur Afifah[3], Ignatius Abasimi[4]

[1, 2, 3]Economic and Business, Ahmad Dahlan University, Indonesia
[4]School of Economics and Finance, Xi'an Jiaotong University, China

Article Info

ABSTRACT

Farmers' welfare plays an important role in increasing and maintaining agricultural production. Tobacco is one of the plants that has high value and is easy to grow in Indonesia and has an influence on society and economic development, especially agriculture. This study aims to determine whether income, land area, length of education, length of work, and household consumption affect the welfare of tobacco farmers in Banaran Village, Tembarak District, Temanggung Regency. The population in this study were the people of Banaran Village, Tembarak District, Temanggung Regency. The sample in this study used a purposive sampling method, namely 200 samples. This research uses descriptive analysis and multinomial logit test. The results of the research conducted showed that there were two variables that had a positive and significant influence, namely the variable land area of 0.034 and length of work variable of 0.048, while the variables that were not significant were income of 0.407, length of education of 0.209, and household consumption variable of 0.275. And for the simultaneous test all the independent variables used influence the welfare of tobacco farmers.

Corresponding Author

Maman Faudzi
Email: maman2000010035@webmail.uad.ac.id

INTRODUCTION

Indonesia's natural wealth makes agriculture and plantations one of the jobs that many are involved in and occupied. Many Indonesian people take advantage of the natural wealth they have to fulfill their daily needs by working as farmers.

Welfare of farmers plays an important role in increasing and maintaining agricultural production. The growing growth of the agricultural sector can reduce poverty and provide impetus for increased and stronger economic growth(Abidin, 2021). Welfare is an

important part of a country, the problem of developing countries is the welfare of its citizens.

Based on Social Welfare Law no. 11 of 2009, these conditions are found to fulfill various material, spiritual and social needs for the community to live and develop normally through social activities in Indonesia.

As Indonesia is known as an agricultural country, the agricultural sector plays an important role in the country's development, namely the provision of food for the entire population. Apart from food crops, plantations also play an important role in supporting state revenues, one of the agricultural crops with high economic value is tobacco. Tobacco is one of the crucial crops in Indonesia.

Tobacco is a high-quality and easy-to-grow crop in Indonesia. In some areas, tobacco is grown regularly throughout the year because of its fertility. Tobacco in each region has its own uniqueness and characteristics, so it has different qualities. This is influenced by environmental components and the planting process carried out by each farmer is different.

Banaran Village is a village located in Tembarak District, Temanggung Regency. Banaran Village's economy is dominated by the agricultural sector. The agricultural land is quite extensive, the majority of the people work as farmers. The superior crop planted by the Banaran people is tobacco. The emergence of problems of poverty, income labor and employment, the status of land use in public facilities shows that people's understanding of the applicable laws is still weak. One reason is the uneven level of public education.

Various obstacles faced by tobacco farmers can affect the welfare of tobacco farmers, which in turn will decrease economic growth. Agricultural production is most dependent on nature as the main resource, so the income generated is unstable, as well as the business of tobacco farmers. The welfare of tobacco farmers achieved by farmers is influenced by several factors, including income, land area, land ownership, education and household consumption.

Based on this background, this research has the following objectives:
1. To find out whether income can affect the welfare of tobacco farmers.
2. To find out whether the area of land can affect the welfare of tobacco farmers.
3. To find out whether the length of education can affect the welfare of tobacco farmers.
4. To find out whether length of work can affect the welfare of tobacco farmers.
5. To find out whether household consumption can affect the welfare of tobacco farmers.

LITERATURE REVIEW
Welfare
Based on the Social Welfare Law of the Republic of Indonesia Number 11 of 2009, the requirements are to meet material, spiritual and social needs, so that people can live decently and develop in carrying out their social functions.

Welfare is an important aspect that must be considered to strengthen social and economic stability, this condition is also needed to reduce social jealousy in society. A person's welfare from an economic perspective is seen from his ability to meet his needs, the higher his ability to meet his needs, the higher his level of social welfare.

Welfare goals according to Law Number 11 of 2009, article 3 concerning the implementation of social welfare, are as follows:

1. Improving standard of living, quality, and survival

2. Strengthen social functions to achieve independence
3. To improve social skills in dealing with social problems.
4. Strengthening social awareness and responsibility in the context of providing large-scale and long-term social welfare
5. Increase community capacity and motivation in procuring inclusive and comprehensive social welfare
6. Improving the quality of social networking managers

Income
Through production and service activities, income is an important factor in improving the standard of living of many people. The amount of a person's income can be seen from the type of work.
According to Sukirno S (2000), in economic terms, profit is determined by the use of remuneration or other production factors owned by small businesses and households. These factors can be in the form of rent, wages, interest, profits, and profits.

Land area
Sukirno (2002) states that the land is a factor of production which covers the upper part of the earth that can be used for agriculture and housing, including the natural wealth it contains. In agriculture, land dominance is the most important factor for increasing welfare(Arman, 2017).
In general, the larger the land area, the more yields produced from the land. However, large land areas are not necessarily more efficient than small land areas because everything depends on farmers as land managers.

Length of education
Education has an important role for the development of existing human resources (HR). For developing countries, basic education is a top priority in developing human resources from an early age. Education is interpreted as being a fundamental and systematic effort to achieve a better standard of living(Ardika and Budhiasa, 2017). Education is defined as the ability to move and develop from within oneself (inner abilities) and develop individual strengths.
The higher a person's educational level, the more it affects the status of a prosperous family because there is a correlation with the quality of an established job and income. One important factor that can improve the social status of society is education from all walks of life(Alimuddin, 2022).

Length of work
Length of work is the length of time or length of work in a certain place. Length of work can also be interpreted as the length of time that has been done since someone did the job. According to (Ranupendoyo, 2005) the duration of a job can reflect one's experience in dealing with the field he is engaged in.
In general, someone who is more experienced does not need assistance than someone who is not experienced at all. From this we can conclude that the longer someone works in their field, the more experienced and professional that person is(Fada, 2020).

Household consumption

Household consumption is a form of community economic activity in meeting various needs for goods and services. From consumption of goods and services have personal satisfaction with the goods used.

The act of consumption or expenditure is carried out in every daily activity by everyone with the aim of achieving a level of satisfaction and meeting the types of needs, both for primary and secondary basic needs as well as tertiary needs. The level of consumption reflects the level of one's welfare. It can be observed that household consumption does not end at a certain level, but continues to increase until the peak of prosperity and the highest level of satisfaction is prosperity.

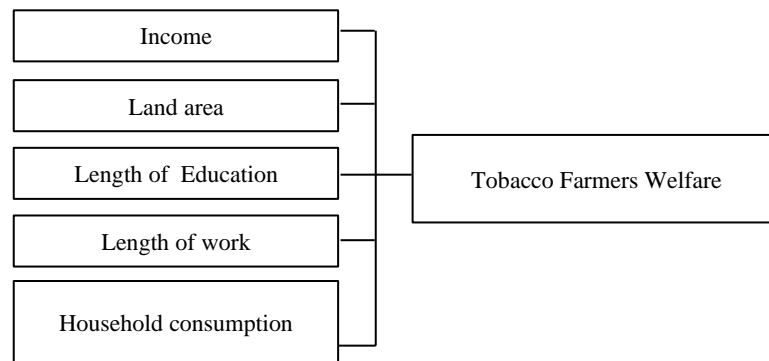From this analysis, we can make a framework chart as follows:

Figure 1. Framework Chart

RESEARCH METHODS

The type of data used in this research is descriptive quantitative. This approach is used in order to know the answers to the questions given to respondents related to the research object used.

The data source used is primary data, data obtained through field surveys with original data collection methods such as direct interviews with respondents and questionnaires. The population used is tobacco farmers in Banaran Village, Tembarak District, Temanggung Regency.

Sampling in this study used the following Slovin formula $n = \frac{N}{1 + Ne^2}$ where N is the total population, n is the number of samples, and e is the error tolerance limit.

The dependent variable used in this study is the welfare of tobacco farmers, to measure and determine the variables of community welfare with several indicators namely population, health and nutrition, education, employment, consumption levels and patterns, housing and the environment, and other social indicators. These indicators are grouped into 3 categories to determine the level of welfare, namely high, medium and low.

In this study, the independent or independent variables used in this study were income, land area, years of education, length of work, and household consumption.

In this study the data analysis techniques used are as follows:
1. Descriptive Analysis
   Descriptive statistical analysis, namely statistical analysis used in analyzing data when describing the data that has been collected without making a broader general decision(Muhson, 2006).
2. Multinomial Logit Analysis

Multinomial logit regression is a logistic regression that is used on a scale of independent variables that have polychotomous or multinomial properties. The following is the equation of the multinomial logistic regression model:

$$gj(x)=\beta j0+\beta j1x1+\beta j2x2+\cdots+\beta jpxp$$

where gj(x) is the dependent variable, which is a polytomous variable with a nominal measurement scale, xp is the independent variable, and βjp is the parameter.

3. Hypothesis testing
   Hypothesis testing is used to see the correctness of the answer to the problem. Basically, a hypothesis is a problem statement in the form of a provisional allegation and is tested with the following statistics:
   a. Model Fit Test
      The statistical test used in testing the logistic regression suitability model is the Goodness of fit with the following hypothesis:
      H0: The model is appropriate (there is no difference between the observed results and the possible prediction results of the model)
      H1: The model is not suitable (there is a difference between the observed results and the possible prediction results of the model)

      Statistic test:

      $$C = \sum_{k=1}^{g} \left(\frac{(0k - nk\,\pi k)^2}{nk\,\pi k(1 - nk)} \right)$$

      The condition for rejection (Reject H0) is if $C > \chi 2\alpha, v$, this indicates that the model is not fit (there is a difference between the observed results and the probability of the predicted model results(Zahroh and Zain 2019).
   b. Simultaneous Test
      This test was conducted to see whether the model is correct or significant and to see the effect of the predictor variables in the model along with the following hypotheses:
      H0: β1 = β2 =.... =βp = 0   (there is no variable effect on the model)
      H1: there is at least one βj ≠ 0, j= 1,2,...b
      This statistical test uses the G-test statistic or the likelihood ratio test, with the test statistics:

      $$G = -2\ln \left[\frac{\left(\frac{n1}{n}\right)^{n1}\left(\frac{n2}{n}\right)^{n2}\left(\frac{n3}{n}\right)^{n3}}{\Pi_{j=1}^{b} \pi 1(x)^{y1j}\,\pi 2(x)^{y2j}\,\pi 3(x)^{y3j}} \right]$$

      G-test statistics follow the Chi-Square distribution, so comparisons are made to make a decision$\chi 2\alpha, v$. The condition for rejecting H0 is the value of G $> \chi 2\alpha, v$which is degrees of freedom = v (number of predictor variables)(Zahroh and Zain, 2019).
   c. A priori test
      The a priori test aims to determine the suitability of the hypothesis between the studies conducted based on the results obtained. If the initial hypothesis is

consistent, it can be stated that the estimation model has been successful in this study(Purnawati and Khoirudin, 2019).

d. Partial Test

Partial test with the Wald test is used to determine whether the predictor variable has a significant effect or not on the response variable. The partial testing hypothesis is as follows(Sadik, 2019):

H0: $\beta j = 0$ (the coefficient βj is not statistically significant)

H1: $\beta j \neq 0$ (coefficient of βj statistically significant), where j= 1,2,3,...,p.

Wald Test Statistics:

$$Wald = \frac{b}{SEb}$$

Notation b is the estimate of the parameter βj and SEb is the estimate of the standard error of b. The statistic for the W2 test is the Wald test, which examines the chi-square distribution for rejecting H0 if $W2 > \chi 2(a,v)$ or P-value $< \alpha$, where v is the number of predictions.

e. Parameter Interpretation

Logistic regression was interpreted using the odds ratio (OR) to indicate when the ratio of events increased or decreased(Zahroh and Zain, 2019). Odds ratios are used to determine the likelihood or risk in the relationship between predictor variables and response variables.

RESULTS AND DISCUSSION

Descriptive Analysis

The level of welfare is an aspect of life that can be determined from several supporting indicators in its measurement. According to the Central Bureau of Statistics, there are seven indicators of welfare levels including health, population, employment and nutrition, consumption levels and patterns, housing environment, and other social issues.

The existing levels of welfare are grouped into three parts, namely moderate with a value of 1, medium with a value of 2 and high with a value of 3. From the analysis of the seven respondents' indicators of welfare levels originating from the Central Bureau of Statistics, the results for the category of tobacco farmers' welfare levels are as follows:

Table 1. Results of Welfare Levels of Tobacco Farmers

Criteria	Frequency	%
Tall	0	0%
Currently	196	98%
Low	4	2%
Total	200	100%

From the table above it is shown that most of the tobacco farmers have moderate welfare with a frequency of 196 tobacco farms (98%) of the total frequency of 200 tobacco farms as respondents. The value of the other frequencies is filled by the welfare level with the low criteria of 2 tobacco farmers or 2%, and 0% or 0 tobacco farmers included in the welfare level with high criteria.

Multinomial Logit Analysis

Table 2. Logistic Regression Analysis Results

Tobacco Farmers Welfare (Y)	B	std. Error	Wald	Df	sig
Intercepts	-4.22	7,417	0.32	1	0.57
Revenue (X1)	0.001	0.002	0.55	1	0.46
Land area (X2)	8,356	4,886	2.93	1	0.09
Length of education (X3)	-0.98	0.91	1.17	1	0.28
Working time (X4)	-1.09	0.612	3,15	1	0.08
Household consumption (X5)	0.005	0.005	0.95	1	0.33

The table above is the result of logistic regression analysis which can be written using the logistic regression equation as follows:

$Y= -4.219 + 0.001X1 + 8.356X2 - 0.983X3 - 1.086X4 + 0.005X5$

1. The value of the intercept results in the table above provides information that the intercept value is -4.219 meaning that if the variable income, land area, length of education, length of work, and household consumption = 0, then the variable welfare of tobacco farmers will be worth -4.219.
2. The income variable is 0.001, meaning that if the income variable changes one unit, it will change the welfare of tobacco farmers by 0.001. So income increases, the welfare of tobacco farmers also increases by 0.001.
3. The variable land area is 8.356, meaning that if the variable land area changes by one unit, it will change the welfare of tobacco farmers by 8.356. So the land area increases, the welfare of tobacco farmers also increases by 8.356.
4. The length of education variable is -0.983, meaning that if the variable length of education changes by one unit, it will change the welfare of tobacco farmers by -0.983. So the length of education increases, the welfare of tobacco farmers also increases by -0.983.
5. The length of work variable is -1.086, meaning that if the length of work variable changes by one unit, it will change the welfare of tobacco farmers by -1.086. So the length of work increases, the welfare of tobacco farmers also increases by -1.086.
6. The household consumption variable is 0.005, meaning that if the household consumption variable changes by one unit, it will change the welfare of tobacco farmers by 0.005. So household consumption increases, the welfare of tobacco farmers also increases by 0.005.

Hypothesis Testing

Model Fit Test

The first step is to carry out a multinomial logistic regression analysis, followed by a model suitability test, this test is used to determine whether the model formed is in accordance with the data (fit).

Table 3. Model Suitability Test

Model Fit Test			
	Chi-Square	df	Sig.
Pearsons	1661,343	192	0
Deviance	26,868	192	1

Based on the results of table 4.3, Pearson's p (sig.) value is 0.000. A value of 0.000 indicates Pearson is smaller than alpha (5% = 0.05), then H0 is rejected and states that the model is not suitable or the model is not fit. This means that the model cannot explain the data.

Table 4. Pseudo R-square values

Pseudo R-Square Value	
Cox and Snell	0.06
Nagelkerke	0.34
McFadden	0.32

Based on the results of the table above, it is known that the Pseudo R-Square number is taken from Nagelkerke of 0.336 which indicates that the plurality of independent variable data in the study describes the diversity of data from the welfare variable of 33.6% while the remaining 66.4% is explained by other independent or independent variables outside the research model.

Simultaneous Test

Table 5. Simultaneous Test

Model Fitting Information				
	Model fitting criteria	Likelihood ratio tests		
Model	**-2 Logs Likelihood**	*Chi-Square*	**df**	**Sig.**
Intercept Only	39,216			
Finals	26,868	12,347	5	0

According to the results of the simultaneous test that has been done previously, in the table above the chi-square value in the final row has a value of 12.347 and the table's chi-square value is 11.070. This means that there is at least one statistically significant independent variable with a p-value (sig.), on the other hand p (sig.) in the table is 0.030. Which value is smaller than alpha 5% or 0.05, then in this case H0 is rejected, which means that there is at least one independent variable which statistically has a significant effect on the response variable. In the simultaneous test stated significant, then it can proceed to the partial test.

1. A Priori Test

Table 6. A Priori Test

Variable	hypothesis	Results	Information
Income	+	-	It is not in accordance with
Land area	+	+	In accordance
Length of education	+	-	It is not in accordance with
Long work	+	+	In accordance
Household consumption	+	-	It is not in accordance with

2. Partial Test

Table 7. Partial Test

effects	Partial Test				
	Model fitting criteria	Likelihood Ratio Tests			
	-2 Logs Likelihood of Reduced Model	Chi-Square	df	Sig.	Information
Intercepts	27,211	0.343	1	0.558	
Income	27,555	0.687	1	0.407	Not significant
Land area	31,387	4,518	1	0.034	Significant
Length of education	28,447	1,578	1	0.209	Not significant
Length of work	30,769	3,901	1	0.048	Significant
Household consumption	28,062	1,194	1	0.275	Not significant

One of the basics in decision making is to compare the Sig. with alpha, if sig.<0.05 (sig. value is smaller than alpha) then there is a partial influence of the independent variable on the dependent variable.

    a. Revenue has a sig value. of 0.407 > 0.05, meaning that partially the income variable does not have a significant effect on the welfare of tobacco farmers.

    b. The land area has a sig value. of 0.034 <0.05, meaning that partially the variable land area has a significant effect on the welfare of tobacco farmers.

    c. The length of education has a sig value. of 0.209 > 0.05, meaning that partially the length of education variable has no significant effect on the welfare of tobacco farmers.

    d. Length of work has a sig value. as large as 0.048 <0.05, meaning that partially the length of work variable has a significant effect on the welfare of tobacco farmers.

    e. Household consumption has a sig. of 0.275 > 0.05, meaning that partially the household consumption variable does not have a significant effect on the welfare of tobacco farmers.

Interpretation of Multinomial Logit Regression Analysis

Table 8. Odds Ratio

Tobacco Farmers Welfare (Y)	B	std. Error	Wald	Df	sig	Exp(B)
Intercepts	-4.22	7,417	0.32	1	0.57	
Revenue (X1)	0.001	0.002	0.55	1	0.46	1,001
Land area (X2)	8,356	4,886	2.93	1	0.09	4257,67
Length of education (X3)	-0.98	0.91	1.17	1	0.28	0.374
Working time (X4)	-1.09	0.612	3,15	1	0.08	0.338
Household consumption (X5)	0.005	0.005	0.95	1	0.33	1.005

The odds ratio (OR) value is shown in the Exp(B) value, the odds ratio value can be interpreted if the value is greater than 1 indicating that when the independent variable increases, the probability of the outcome will increase. Conversely, if the value is less than 1, it indicates that when the predictor increases, the likelihood of the outcome occurring will decrease. The results of the odds ratio in the table above tend to be farmer welfare as follows:

    1. Farmers' welfare for the income variable experienced a trend level of 1.001.

    2. Farmers' welfare for the variable land area experienced a trend level of 4257.665.

3. Farmers' welfare for the length of education variable experienced a trend level of 0.374.
4. Welfare of farmers for the length of work variable experienced a trend level of 0.338.
5. Farmers' welfare for the household consumption variable experienced a trend level of 1.005.

Discussion

This study aims to find out whether the dependent variable, namely the welfare of tobacco farmers, is influenced by the independent variables, namely income, land area, length of education, length of work and household consumption. From the partial test results can be explained as follows:

The Effect of Income on The Welfare of Tobacco Farmers

The results of the research conducted showed that the income variable had no influence on the welfare of farmers, indicated by the Likelihood ratio test with a contribution of 0.407 ($p > 0.05$), a chi-square value of 0.687. The hypothesis put forward in this research is that income has a positive effect on the welfare of tobacco farmers, from this it can be concluded that income has results that are not in accordance with the hypothesis that has been proposed.

The results of this study are different from research (Amali and Alhudhori, 2020) which shows that income has an influence on welfare. The income of tobacco farmers in Banaran Village depends on the amount of tobacco harvest each season.

Tobacco plants are planted during the dry season, while during the rainy season, tobacco farmers usually plant various types of vegetables so that the income they earn can be sufficient for their daily needs. With uncertain tobacco yields, it will affect the income of tobacco farmers in Banaran Village. Household needs, which are increasing every day and are uncertain, cannot be balanced with income from tobacco products and crop yields which depend on the season. The lower the income of tobacco farmers can affect the level of welfare.

The Effect of Land Area on The Welfare of Tobacco Farmers

From the results of research conducted on the variable land area, it shows that there is an influence on the welfare of farmers, indicated by the Likelihood ratio test with a contribution of 0.034 ($p < 0.05$), a chi square value of 4.518. The hypothesis presented in the study is that land area has a positive impact on the welfare of tobacco farmers, from this it can be concluded that land area has results that are in accordance with the hypothesis that has been proposed.

The results of research conducted by (Wahed, 2015) obtained results which emphasized that land area has a significant influence on farmer welfare. This goes straight according to the theory used where land area is one of the main factors in increasing agricultural output which can increase the level of welfare of tobacco farmers.

The Influence of Length of Education on The Welfare of Tobacco Farmers

The results of the previous research explained that the variable length of education had no effect on the welfare of farmers, indicated by the Likelihood ratio test with a contribution of 0.209 ($p > 0.05$), a chi-square value of 1.578. The hypothesis put forward in this research is that the length of education has a positive effect on the welfare of

tobacco farmers, from this it can be concluded that the length of education has results that are not the same as the hypothesis that has been proposed.

The results of this study are in line with what has been done by (Hawa, 2020) who found that the level of education does not affect the welfare of tobacco farmers. The condition of tobacco farmers in Banaran Village shows that the majority of tobacco farmers in Banaran Village have only completed 6 years of education or equivalent to elementary school. On average, people in Banaran Village who work as tobacco farmers are hereditary from their parents, so that most of the Banaran Village people work as tobacco farmers.

Apart from that, the income from tobacco farmers is only enough to cover the daily needs of the farmers. Besides that, according to the tobacco farmers in Banaran Village, to become a farmer does not require a high level of education.

The Influence of Long Work on The Welfare of Tobacco Farmers
From the results of research that has been done shows that the length of work variable has an influence on the welfare of farmers, shown by the Likelihood ratio test with a contribution of 0.048 ($p < 0.05$), a chi-square value of 3.901. The hypothesis put forward in this research is that income has a positive effect on the welfare of tobacco farmers. From this, it can be concluded that length of work has results that are in accordance with the hypothesis that has been proposed.

The results of the research are in line with research conducted by (Arbiat, 2021) showing that length of work has an effect on welfare, length of work shows the experience that farmers have in mastering their field.

The Effect of Household Consumption on The Welfare of Tobacco Farmers
In the research that has been done, the results show that the household consumption variable has no effect on the welfare of farmers, indicated by the Likelihood ratio test with a contribution of 0.275 ($p > 0.05$), a chi square value of 1.194. The hypothesis put forward in this study is that farmer household consumption has a positive influence on the welfare of tobacco farmers, from this it can be concluded that household consumption has results that are not in accordance with the hypothesis that has been proposed.

The results of this study differ from the results of research (Hanifah and Joko, 2016) that the consumption habits of farming households have an effect on welfare. Humans as social beings and individuals have unlimited needs, regardless of size and type. Consumption habits are used as a standard of living for a person, and are used as a measure of a good standard of living in order to be able to live decently like other people's lives.

The limited income budget for tobacco farmers in Banaran Village can delay the consumption of goods that have high value. As consumers, tobacco farmers choose basic needs for consumption and will consider the use value of the goods purchased. The size for this research is food consumption and non-food consumption.

CONCLUSION
Conclusion
Based on the research that has been conducted, the following conclusions can be drawn:
1. The income variable (X1) on the welfare of tobacco farmers (Y) is not significant, this is due to the sig. of $0.407 > 0.05$, and the chi-square value is 0.687.

2. The variable land area (X2) on the welfare of tobacco farmers (Y) has a positive and significant effect, with a sig. of 0.034 > 0.05, and the chi-square value is 4.518.
3. The length of education variable (X3) on the welfare of tobacco farmers (Y) is not significant, this is due to the sig. of 0.209 > 0.05, and the chi-square value is 1.578.
4. The length of work variable (X4) on the welfare of tobacco farmers (Y) has a positive and significant effect, with a sig. of 0.048 > 0.05, and the chi-square value is 3.901.
5. The household consumption variable (X5) on the welfare of tobacco farmers (Y) is not significant, this is due to the sig. of 0.275 > 0.05, and the chi-square value is 1.194.

Suggestion

Based on this research, the following suggestions can be given:
1. Land area has a positive and significant influence on the welfare of tobacco farmers. This means that it is expected that tobacco farmers who have relatively large land should cooperate with competent external parties in managing the land so that the results obtained are more optimal thereby increasing the income of tobacco farmers and their welfare.
2. Length of work has a positive and significant impact on the welfare of tobacco farmers. This means that tobacco farmers who make their profession their main job can take part in various trainings on various types of land management techniques to obtain higher quality crop yields and can develop innovations from various other types of plants, not just focusing on tobacco plants.

REFERENCES

Abidin, M. Zainul. (2021). National Economic Recovery During the Covid-19 Pandemic: Analysis of Labor Productivity in the Agricultural Sector. *Indonesian Treasury Review: Journal of the Treasury, State Finances and Public Policy, 6*(2):117–38.

Alimuddin, Andi. (2022). The Effect of Education Level on the Welfare of Fishermen's Families in Waci Village, South Maba District, East Halmahera Regency, North Maluku Province. *Econometrics, 5*(1):1–23.

Ardika, IW and Budhiasa, GS. (2017). Analysis of Farmers Welfare Levels in Bangli Village, Baturiti District, Tabanan Regency. *Pyramid Journal, 12*(2), 87–96.

Arman, P. Joni. (2017). Analysis of Factors Affecting Rice Farmers' Income in Masaran District, Sragen Regency. *Economics Development Analysis Journal, 3*(1):212–24.

Fada, Hawa Abila. (2020). Welfare Levels of Tobacco Farmers in Petarangan Village, Kledung District, Temanggung Regency. Thesis. Indonesian Islamic University.

Mohson, Ali. (2006). Quantitative Analysis Techniques 1 Quantitative Analysis Techniques. Academia 1–7.

Purnamawati, Dina Listri and Rifki Khoirudin. (2019). Absorption of Labor in the Manufacturing Sector in Central Java 2011-2015. *Journal of REP (Development Economic Research), 4*(1):41–52.

Sadik, Kusman. (2019). *Multinomial Logistics Regression*. Department of Statistics IPB 1–19.

Social Welfare Law No. 11 of 2009 of the Republic of Indonesia

Zahroh, Zabrinna Zenitha and Ismaini Zain. (2019). Multinomial Logistic Regression Analysis of Factors Affecting Household Clean Water Sources in East Java. *Journal of Science and Arts ITS, 7*(2).