

## Factors Affecting the Young Generation Reluctance to Be Farmer



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**ABSTRACT:** This study aims to analyze the factors that influence the millennial generation who are not motivated to work in the agricultural sector. The research approach used is quantitative research. With data analysis, namely multiple linear regression analysis with variable Y: unmotivated millennial generation working in the agricultural sector, Variable X consists of income, future, employment status, technology, uncertainty, and knowledge. The results of this study are, that the factors that influence the millennial generation are not motivated to work in the agricultural sector significantly, namely income and knowledge, while the future factors, employment status, technology, and uncertainty have an insignificant effect.

**KEYWORDS:** millennial generation, motivation to work in the agricultural sector.

### INTRODUCTION

The agricultural sector is the main sector that plays an important role in the national economy in absorbing labor, a source of economic growth, and a contributor to foreign exchange. In addition, the agricultural sector is also a driving force for other sectors such as the industrial sector, the trade sector, and others (Central Bureau of Statistics, 2018). On the other hand, the agricultural sector is committed to the successful implementation of the Sustainable Development Goals (SDGs) by achieving the 2030 development agenda (Ministry of Agriculture, 2020). However, the agricultural sector is currently still experiencing various kinds of problems that must be resolved. The conversion of agricultural land into non-agricultural land, decreased food production, low farmer education, subsistence agriculture, and others (Nugroho et al., 2018; Yodfiatfinda, 2018). Until now, the agricultural sector is still experiencing serious problems in the field of human resources, especially agricultural workers (Yodfiatfinda, 2018).

Susilowati (2016), the number of agricultural workers at a young age is not large and tends to decline when compared to the previous 10 years. Data on agricultural labour is also dominated by old age with more than 45 years of age. This data means that in general, the number of young farmers has decreased relatively sharply, while older farmers have continued to increase.

The number of millennial in the agricultural sector is only 21.95% of the total number of generations working in the agricultural sector, the rest is filled by generations before millennial, namely generation X and the Baby boom generation or veterans. Generation X and the baby boom generation or veterans are generations who are more than 40 years old (Ratnasari, 2020). The Indonesian Farmers Harmony Association (HKTI) also noted that the number of farmers in Indonesia from time to time continues to decline, this is due to the lack of interest of the younger generation, especially the millennial generation to study and pursue agriculture (Gulo et al., 2018).

The problem of interest in the millennial generation is very dependent on self-motivation. Motivation is an impulse that arises on a person consciously or not to take any action with a specific purpose (Ministry of Education and Culture, 2021). Through the motivation possessed by the millennial generation, it is hoped that there will be a regeneration of the agricultural workforce so that it can realize agricultural sustainability.

### RESEARCH METHODS

The research approach used is quantitative research. By analysing the data using multiple linear regression analysis with the research model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon$$

Y = Millennials are not motivated to work in the agricultural sector

$\beta_0$  = Intercept or constant

$\beta_1 - \beta_6$  = Regression coefficient

$\epsilon$  = Error or residual value

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X1 = Income

X2 = future

X3 = Employment Status

X4 = Technology

X5 = Uncertainty (uncertainty)

X6 = Knowledge

Researchers determine respondents who come from the millennial generation with the following criteria:

1. Adolescents who graduate from high school/equivalent will choose a college.
2. Students of the Faculty of Agriculture
3. Bachelors of the Faculty of Agriculture (fresh graduates) who have not worked

If in a study you will perform multivariate analysis (correlation or multiple linear), then the minimum number of sample members is 5 and a maximum of 10 times the number of variables studied (Sugiyono, 2017). In this study there are 7 variables (independent and dependent), so the number of sample members =  $7 \times 10 = 70$  respondents to meet the population criteria.

The data used are primary data with the method of collecting data using the survey method by distributing online questionnaires through the help of google forms. Filling out the questionnaire was done independently by the respondent through a self-administrated questionnaire (respondents filled in themselves on the list of questions provided). The online survey is carried out by distributing questionnaires that are not controlled so that the questionnaire can be filled out by anyone and anywhere. Respondents only needed approximately 7 (seven) minutes to complete the questionnaire.

To ensure that the respondent is included in the search criteria, the researcher determines from the initial question or screening in the questionnaire. The question material that will be distributed through the questionnaire has a grid in table 1.

**Table 1. The questionnaire materials**

Variable		Indicator
Millennial are not motivated to work in the agricultural sector (Y)	1.	Salary amount
	2.	Utilization of technology
	3.	Social status
Income (X <sub>1</sub> )	1.	The amount of income
	2.	Necessities of life
	3.	Future guarantee
Future (X <sub>2</sub> )	1.	Certainty
	2.	Profession/business
	3.	Livelihood
Employment status (X <sub>3</sub> )	1.	<i>Prestige 2.</i>
	2.	<i>Social status</i>
	3.	<i>3. Meet the needs of life</i>
Technology (X <sub>4</sub> )	1.	Modern
	2.	Simple
	3.	Knowledge/adaptation
Uncertainty (X <sub>5</sub> )	1.	Market
	2.	Price
	3.	Products
Knowledge (X <sub>6</sub> )	1.	Education
	2.	Experience
	3.	Understanding/meaning

## FINDINGS AND DISCUSSION

Every individual has the will or motivation to achieve something. Based on the results of the study, several factors influence the millennial generation to be reluctant or unmotivated to work in the agricultural sector (Y) including income (X1), Future (X2), Employment Status (X3), Technology (X4), uncertainty (X5) and knowledge (X6).

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To find out the factors that influence the unmotivated millennial generation to work in the agricultural sector, the researchers used multiple linear regression analysis. The first stage that must be passed is the classical assumption test. The following are the results of the classical assumption test on this research data:

### 1. Normality test

The normality test aims to see if a regression model has a normal distribution or not on the independent, dependent, or both variables. A regression model can be said to be good if it has variables that are normally distributed or close to normal. The following are the results of the normality test on this research variable:

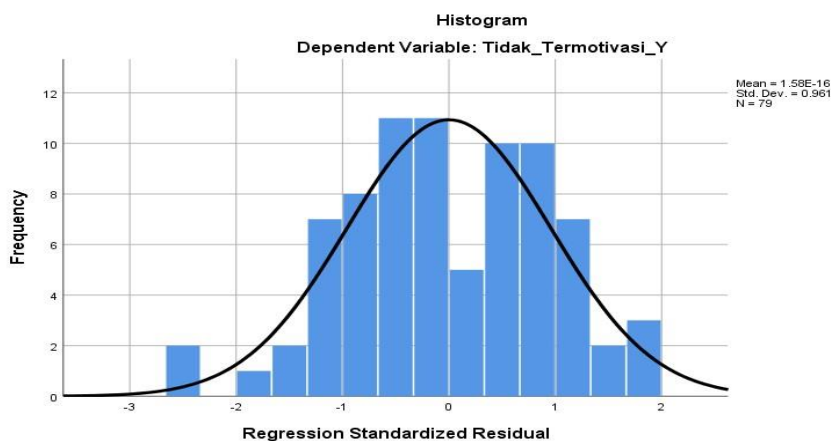


Figure 1. Normality test

On the results of the normality test (histogram) a line that forms a mountain is drawn perfectly, it can be concluded that the research data is normally distributed. In the normal probability plots test results, the points follow a diagonal line starting from point 0 and do not widen, so the data in this study are normally distributed.

Besides being shown by the histogram above, the normality test can also be seen utilizing the skewness ratio and the kurtosis ratio. The following are the results of calculating the skewness ratio and the kurtosis ratio:

Table 2. Skewness and kurtosis test

	Descriptive Statistics				
	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Unstandardized Residual	79	-.190	.271	-.393	.535
Valid N (listwise)	79				

The skewness ratio is the skewness value divided by the standard error skewness, while the kurtosis ratio is the kurtosis value divided by the standard error kurtosis. As a guide, the scale of the two ratios is between -2 to 2, so the data distribution can be called normal. Based on table 2, it can be seen that the skewness ratio =  $-0.19/0.271 = -0.701$ , while the kurtosis ratio =  $0.271/0.393 = 0.689$ . Because the skewness ratio and the kurtosis ratio are between -2 to 2, it can be concluded that the data is normally distributed.

### 2. Multicollinearity test

Table 3. Multicollinearity test

Coefficients<sup>a</sup>

Model		Zero-order	Correlations		Collinearity	
			Partial	Part	Tolerance	VIF
1	Income_X1	.548	.365	.203	.651	1.535
	Future_X2	.246	.026	.014	.792	1.263
	Employment Status_X3	.215	.021	.011	.751	1.332
	Teknologi_X4	.360	.133	.070	.639	1.565
	Uncertainty_X5	.382	.140	.074	.630	1.588
	Knowledge_X6	.782	.767	.620	.872	1.146

a. Dependent Variable: Tidak\_Termotivasi\_Y

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This test is used to see the correlation between the independent variables. A good model in the multicollinearity test is a model that does not correlate with each independent variable by looking at the VIF value for each variable less than 5. Based on the results in the table above, the VIF value for each variable is less than 5, this means that the model has a very low correlation or there is no multicollinearity problem in this model.

### 3. Uji Heteroskedastisitas

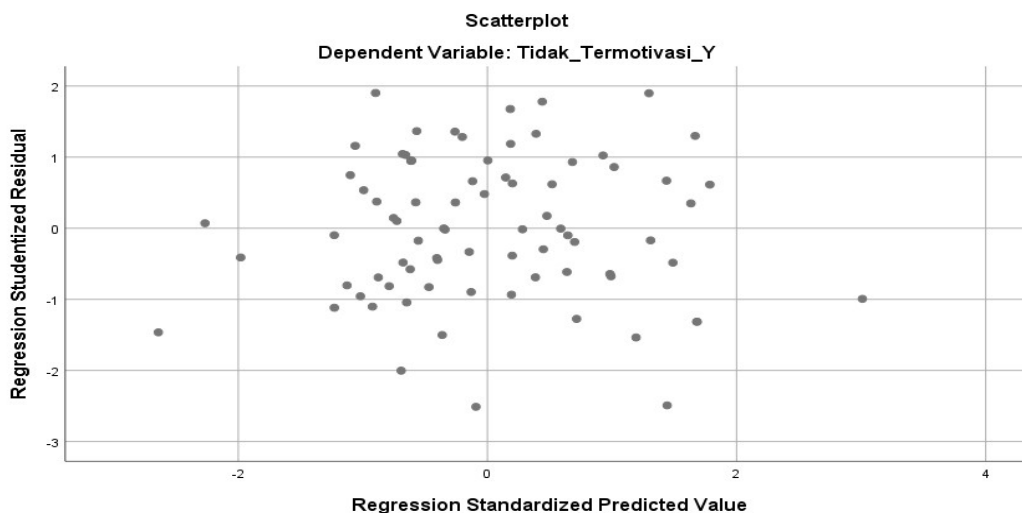


Figure 2. Scatterplot

Based on the scatterplot graph, the points spread randomly and are between the number 0. It can be concluded that the model in this study meets the requirements to be a good model because it is a homoscedasticity model or the variance from the residual value of one observation to another is fixed.

From the three classical assumption tests, namely the normality test, multicollinearity test, and heteroscedasticity test, the classical assumption model has been fulfilled, so the regression model in this study can be carried out for the next test, namely the model feasibility test. The feasibility test of the model was carried out by testing the reliability of the model (F test), regression coefficient test (t-test), and coefficient of determination. The following is the model of the multiple linear regression analysis equations in this study:  $Y = 0.423 + 3.325X_1 + 0.225X_2 + 0.174X_3 + 1.142X_4 + 1.203X_5 + 10.145X_6$

Table 4. F Test

ANOVA <sup>a</sup>					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	799.988	6	133.331	32.570	.000 <sup>b</sup>
Residual	294.746	72	4.094		
Total	1094.734	78			

a. Dependent Variable: y

b. Predictors: (Constant), X6, X2, X4, X3, X1, X5

Sumber : data primer (diolah), 2022

Testing with the F test aims to see the factors that influence the unmotivated millennial generation to work in the agricultural sector simultaneously. The results of the analysis in Table 4 obtained that the F-count value of 32,570 is greater than the F-table of 2.14. These results indicate that the independent variables (income, future, employment status, technology, uncertainty, and knowledge) simultaneously affect the unmotivated millennial generation to work in the agricultural sector as the dependent variable.

To find out how much influence each independent variable has on the unmotivated millennial generation at work in the agricultural sector is carried out using the t-test where the results of multiple linear regression can be seen in table 5.

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Table 5. t-test

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.839	1.982		.423	.673
	X1	.361	.109	.252	3.325	.001
	X2	.033	.148	.015	.225	.823
	X3	.012	.070	.012	.174	.862
	X4	.117	.103	.087	1.142	.257
	X5	.130	.108	.093	1.203	.233
	X6	1.105	.109	.664	10.145	.000

a. Dependent Variable: y

Based on table 5, it can be seen that the determination value of R square is 73.1%, meaning that the unmotivated millennial generation to work in the agricultural sector is influenced by the variables of income, employment status, future, technology, uncertainty, and knowledge. While the rest is influenced by other variables outside this model or variables that are not examined.

Meanwhile, the results of the influence of each independent variable on the dependent variable are as follows:

### 1. Income

In table 5, it can be seen that income (X1) has a significance value of 0.001 because the significance value of 0.001 is less than the probability of 0.05, it can be concluded that income has a significant effect on the unmotivated millennial generation to work in the agricultural sector. The income in this study is in the form of income in the agricultural sector, fulfilling life needs, fulfilling desires, guarantees or insurance for the future.

### 2. Future

Based on table 5, it can be seen that the future (X2) has a significance value of 0.823. Because the significance value of 0.823 is more than the probability of 0.05, it can be concluded that the future does not significantly affect the unmotivated millennial generation to work in the agricultural sector. According to Leavy and Hossain (2014) and Murphy (2014), noting that agriculture is a mentally and physically challenging job, young people do not perceive agriculture as a guarantee for the future (Ogbeide et al. 2015). The findings of Y. Yan Makabori & Tapi (2019) The younger generation is not motivated and sees the desire to work in the agricultural sector as not a top priority (ideal) or hope.

### 3. Employment status

Based on table 5, it can be seen that the employment status (x3) has a significance value of 0.862. Because the significance value of 0.862 is more than the probability of 0.05, it can be concluded that employment status has no significant effect on the unmotivated millennial generation to work in the agricultural sector.

From the results of the study, employment status is not one of the factors causing the millennial generation to be unmotivated to work in the agricultural sector. On the other hand, Fitriyana et al., (2018) stated in their research that youth have a response that employment status in the agricultural sector is quite good because it can improve social status in society, that they also consider that being a farmer is a noble job. After all being a farmer is a job, work that produces food that will be needed all the time.

### 4. Technology

Based on table 5, it can be seen that technology (X4) has a significance value of 0.257. Because the significance value of 0.257 is more than the probability of 0.05, it can be concluded that technology has no significant effect on the unmotivated millennial generation to work in the agricultural sector.

Currently, the millennial generation is very close to the use of technology. The results of research on the influence of technology on the motivation of the millennial generation to work in the agricultural sector are low. Contrary to the results of research (Oktavia & Suprapti, 2020) the younger generation is increasingly interested in the agricultural sector because of the use of modern technology that facilitates work such as agricultural machinery, superior seeds and seeds, and technology in marketing agricultural products online.

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### 5. Uncertainty

Based on table 5, it can be seen that the future (x2) has a significance value of 0.233. The significance value of 0.233 is more than the probability of 0.05, it can be concluded that uncertainty does not significantly affect the unmotivated millennial generation to work in the agricultural sector.

Conditions of uncertainty in agricultural products tend to be high starting from prices, and crop yields to other risks, but in this study, uncertainty does not affect the unmotivated millennial generation to work in the agricultural sector. Oktavia & Suprapti, (2020) stated that youth have a negative perception of risk or uncertainty in agriculture. This is because agricultural products can be attacked by pests which even though they have been overcome, the results are uncertain.

### 6. Knowledge

Based on table 5, it can be seen that knowledge (x6) has a significance value of 0.000. Because the significance value of 0.000 is less than the probability of 0.05, it can be concluded that knowledge has a significant effect on the unmotivated millennial generation to work in the agricultural sector.

Knowledge is an internal factor that exists within a person. The millennial generation's knowledge of agriculture, which is generally only limited to on-farm activities, makes it less attractive, actors have to work under the hot sun and have direct contact with the land and limited land resources. In addition, the number of news failures in the agricultural sector makes agricultural students increasingly reluctant to engage in the world of agriculture (Susilowati, 2016).

## CONCLUSIONS

Based on the results of research that has been carried out, the factors that influence the millennial generation are not motivated to work in agriculture simultaneously, namely income, future, employment status, technology, uncertainty, and knowledge. Meanwhile, the factors that significantly influence the unmotivated millennial generation to work in the agricultural sector are income and knowledge.

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