Analysis of the distribution of international migration based on pushing and pulling factors of migration in Watulimo District, Trenggalek Regency

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Abstract

This study was motivated by the high number of people in Watulimo Subdistrict, Trenggalek Regency, who have undertaken international migration. They mostly stay abroad not just for one or two years but for years. This study analyzes the distribution of international migration based on the push and pull factors of migration. This research was conducted in Watulimo District, Trenggalek Regency using quantitative research methods type hypotheses or explanatory research. The data analysis was carried out using the logit method (binary logistic regression). The results show that the distribution of international migration in Watulimo District is spread over twelve villages, with the most significant driving factors being land ownership and the pull factors. The pull factors contain income and the desired job opportunities in the destination area, as evidenced by the significant value of land ownership is 0.045, the income is 0.000, and the presence of desired jobs in the destination area, with a significant value of 0.005. Those factors have a lower than 0.05 significant value, suggesting their significant influences on international migration.

Keywords: international migration; migration push factors; migration pull factors

1. Introduction

Rapid population growth in rural areas and their lack of job openings have led to abundant residents migrating internationally seeking a better quality of life (Palupi, Sasana, & Suguharti, 2021). Simultaneously, foreign countries have rapid economic growth compared to Indonesia. Population increase or population dynamics is a population change phenomenon, representing the increasing or decreasing number of residents in an area from time to time (Suartha, 2016). Changes in the population are influenced by demographic factors such as births (fertility or birth rate), deaths (mortality), and migration (Nurdin, Ikhsan, Apriyanto, & Kurnianto, 2018). International migration has been recorded since a long time ago, especially in Indonesia. The data from the Central Bureau of Statistics Indonesia suggested that almost all areas in Indonesia have a record of international migration because international migration is one of the elements in the development of a region (Ramadhani, Astutik, Ikhsan, & Pangastuti, 2022). The population arrangements have also been regulated in Law of the Republic of Indonesia Number 10 of 1992 Article 7 concerning population development and prosperous families, but it has not been strictly implemented. A previous study has described the population movements across administrative boundaries in level II (Sulaihah, Petrus, & Teguh, 2018), but there have been no studies reporting population movements from the upper level (province) or lower level (regency).

One of the most influential factors for the high international migration from people in rural areas to foreign countries is the economic factor. International migration mainly provides a better economy for the people because they have more job choices, various types of workforce, facilities, and education, proper transportation, communication and infrastructure, better living standards, and higher income than in the village (Anggun, 2022). However, every individual has their own reasoning for choosing international migration. Generally, their reasonings are mostly circulated around economic, social, political, and psychological factors motivating them to move to an area with a higher value of benefits (Hussain, Abdullah, & Abdullah, 2015).

Relevant previous research on international migration based on the push and pull factors of migration have been carried out by Romdiati (2016), Wirastyani, Kanto, and Siahaan (2016), and Sudibyo, Satris, and Amrullah (2022). They reported low education and economic issues as the driving factor for international migration in in Tulungagung and Malang Regencies. Besides, the age and number of family members and socio-economic factors are also strong supporting factors for international migrant workers. As the continuation from previous studies, this study constructed a map of the international migration distribution and analyzed the push factors from the areas, such as land ownership, employment, marital status, and education, the presence of epidemics, along with the pull factors, indicators of the presence of social networks (Wafirotin, 2016).

Watulimo District has a population of 70,567 people with twelve villages, namely Watulimo, Watuagung, Dukuh, Pakel, Ngembel, Gemaharjo, Slawe, Sawahan, Margomulyo, Prigi, Karanggandu, and Tasikmadu Villages. It has a population growth rate of 0.81% from 2020 to 2021 and a population density of 456.92 per km^2. Its population density is relatively low because many residents in the Watulimo Sub-District have migrated, especially out-migration. The data on Indonesian immigrants showed that the number of Indonesian people arriving in a foreign country is 5,808, and the number of people leaving is 6,347 (Central Bureau of Statistics, 2021). From those numbers, the international migration in Watulimo Regency in 2022 reached 434 (Central Bureau of Statistics, 2021). Meanwhile, the calculation of the outgoing migration rate is 8,681, and the in-migration rate is 7,943 (Thomas, 2018).

An analysis of the push and pull factors of migration as well as the mapping of international migrants is required for analyzing the migrants' decision-making process and the migrants potentially going to do international migration from Watulimo District. Most of the people of Watulimo Subdistrict have been migrant workers for long periods, with many of them even being migrant workers for tens of years. Therefore, an analysis of the distribution of international migration taken by residents in Watulimo Subdistrict is essential. Apart from that, the presence of the COVID-19 pandemic for about two years also presents impacts on the people's economy (Yuniarto, 2016). Additionally, the extensive areas in Watulimo District are regulated as tourist objects, offering an abundance of natural attractions, such as beaches, caves, plantations, and others. This tourism industry contributes to the economy of the Watulimo people. However, COVID-19 influences tourism and income, which may lead to motivating people to carry out international migration to improve their standard of living (Nuriyanto, Astutik, Apriyanto, Nurdin, & Mujib, 2022). Thus, this study aims to analyze the pull and push factors of international migration carried out by residents in Watulimo District, Trenggalek Regency, Indonesia. The results of this study are expected to be a reference for the government, especially in formulating job openings to absorb labor from the surrounding

community, as well as providing direction, counseling, and training to the former and families of Indonesian migrant worker for the effective financial management of their earnings from a foreign country. With proper management, these workers can use their revenue as business capital and more productive activities, considering their relatively high remittances.

2. Method

This research used a quantitative method type hypothesis or explanatory research (Sugiyono, 2015). The population was determined using snowball sampling (Nurdiani, 2014) with a sample size of 209. The population in this study was the entire workforce in Watulimo District.

The research was conducted in twelve villages in Watulimo District, Trenggalek Regency, East Java, namely Watulimo, Watuagung, Gemaharjo, Slawe, Ngembel, Pakel, Dukuh, Margomulyo, Tasikmadu, Prigi, Karanggandu, and Sawahan Villages, from October to November 2022. The independent variable in this study was the distribution of international migration, while the dependent variable was the push and pull factors of migration with nine indicators, namely land ownership, lack of jobs in the home country, pressure from bullies, marital status, outbreaks in the area of origin, level of education, income, the existence of social networks and the desired job opportunities in the destination area. The research flow is shown in figure 1.
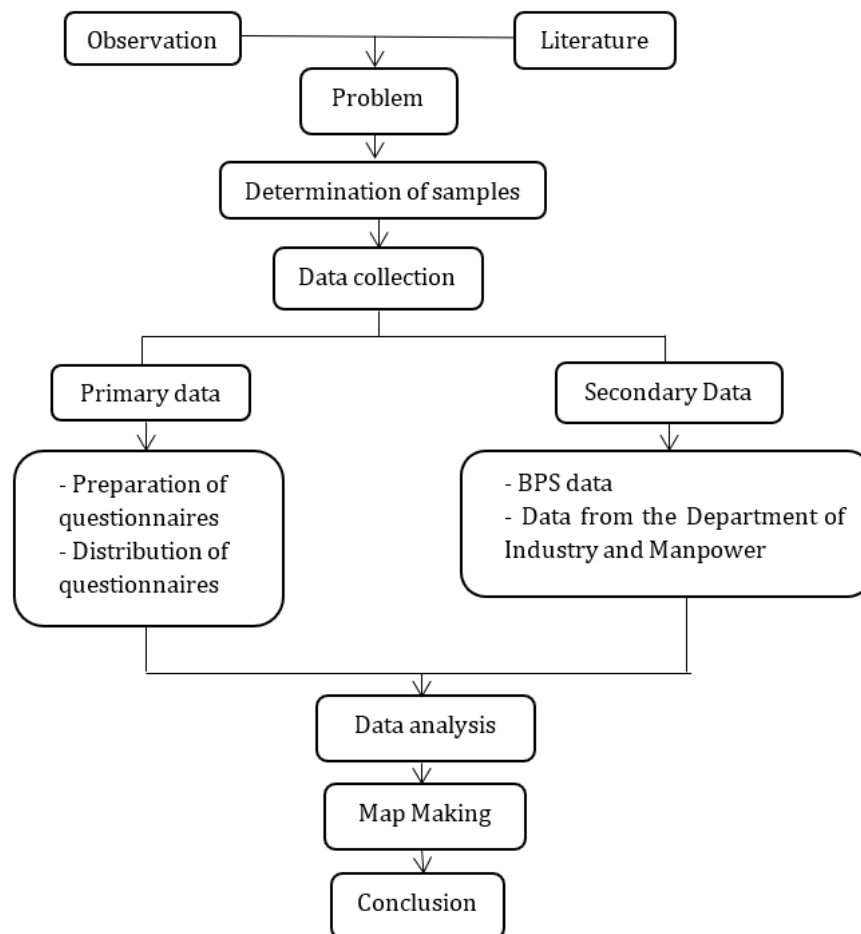

Figure 1. Research Flow Diagram

The obtained data were analyzed using the logit method (binary logistic regression). The data processing was conducted using logit to analyze the capacity of the research model to correctly predict the category (group) of a number of individuals. The logit model equation used to analyze the results of the SPSS 25 is presented in the following (Ghozali, 2016).

$$\text{MI}i = \text{Ln}\left(\frac{Pi}{1-Pi}\right) = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + b_9x_9 + Ui \qquad (1)$$

The parameter estimation of the Binary Logistic Regression model can be carried out using the following intensity. G test or Likelihood Ratio test is a simultaneous test to estimate the obtained parameters and identify the significant effects of the independent variables on the dependent variable. The likelihood ratio or G test on the maximum likelihood method carries a similar function as the F test on the regression OLS method. The Likelihood Ratio test was carried out to find the overall significance of the independent variables that affect the dependent variable. The LR test is carried out with the following hypothesis:

Null hypothesis: H_0: bi = 0

H_0 was accepted if the calculated x2 value < x2 table with α = 0.05 or the calculated LR probability > the critical LR probability value or α = 0.05. This showed that the overall independent variables do not significantly affect the dependent variable.

Alternative hypothesis: H_0: bi ≠ 0

H_0 was rejected if the calculated x2 value > x2 table α = 0.05 or the calculated LR probability < the critical LR probability value or α = 0.05. This showed that the independent variables significantly affect the dependent variable.

The McFadden R-square test was used to measure the variation of the dependent variable affected by all independent variables. In other words, the McFadden R2 determinant coefficient was used to determine the magnitude of the coefficient contribution of the variables of land ownership, reduced employment home village, pressure, marriage, disasters, and epidemics, opportunities to improve living standards, employment, environmental conditions, and the attractive activities from international migration in Watulimo District. This similar value to R2 in the linear regression model was used to measure the goodness of fit of the model by measuring the strength of the relationship between the dependent variable and the independent variable. McFadden's R2 value lies between zero to one (0<R2<1).

The feasibility of the regression model in this study was assessed using the Hosmer and Lemeshow goodness of fit tests. If the statistical value of the Lemeshow goodness of fit test was greater than 0.05, the null hypothesis could be rejected. This signified the model's capacity to predict the observed value or its suitability due to its linearity with the observation data.

The Wald test (Z test) was carried out to assess the influence of each independent variable partially on the dependent variable to determine if an independent variable is viable to include in the model. It signifies that the variables of land ownership, low employment in the home country, pressure, marriage, disasters, and epidemics, opportunities to improve living standards, employment opportunities, environmental conditions, and more engaging activities in the destination country affect the international migration of residents of Watulimo District, Trenggalek Regency. The Wald value was obtained using the following formula.

$$\text{Wald test} = \left(\frac{bi}{sebi}\right)^2 \tag{2}$$

where bi is the regression coefficient, and *sebi* is the standard error.

The Wald test was carried out with the following hypothesis:

If the significance value <0.05, then h0 was rejected, and ha was accepted (significant regression coefficient), showing the independent variable's significant influence on the dependent variable.

If the significance value was ≥0.05, then h0 was accepted, and ha was rejected (insignificant regression coefficient), suggesting no significant effects of the independent variable on the dependent variable.

Odd ratio (tendency ratio) is written as exp(β) before the calculation of logistic regression on the results table. The Odd Ratio was used to determine the probability trend of a variable, on the other hand, the Odd Ratio value for each variable was used to identify the relationship of the dependent variable with all independent variables. The greater the number obtained by expβ showed a more significant opportunity for the variable to influence an individual's decision to migrate internationally. The Odd Ratio was calculated using the following formula.

$$OR = e^{\beta i} \tag{3}$$

With OR being the Odds Ratio, e is the natural logarithm with a value of 2.71828, and βi is the logistic coefficient of the i-variable.

3. Results and Discussion

3.1. Overview of Research Locations

Watulimo District is one of the sub-districts in Trenggalek Regency, East Java, Indonesia. Precisely, it is located in the southeast of Trenggalek Regency. Astronomical it is located between 111° 38'41''-112° 46'41" E and 8° 8'31''- 8° 23'01'' S. Watulimo District is located at an altitude of 7-573 m above sea level. This sub-district is adjacent to Gandusari District in the north, Tulungagung Regency in the east, Indian Ocean in the south, and Munjungan District in the west. Based on the topography, the villages in Watulimo District have hills and beach areas. The research location is illustrated in Figure 2.

According to the Central Bureau of Statistics (2021), most Indonesian migrants target Taiwan as their destination country, followed by then Hong Kong. The popular destination countries for Indonesian migrants are presented in Figure 3. The migrants earn various rates of income from different destination countries. The average monthly income in Taiwan ranges between 8–9 billion dollars, compared to 9–10 billion dollars in Hong Kong, 19–20 billion dollars in South Korea, 14–15 billion dollars in Japan, 8–9 billion dollars in Africa, 6–7 billion dollars in Brunei Darussalam, 6–7 billion dollars in Singapore, and 5–6 billion dollars in Malaysia.
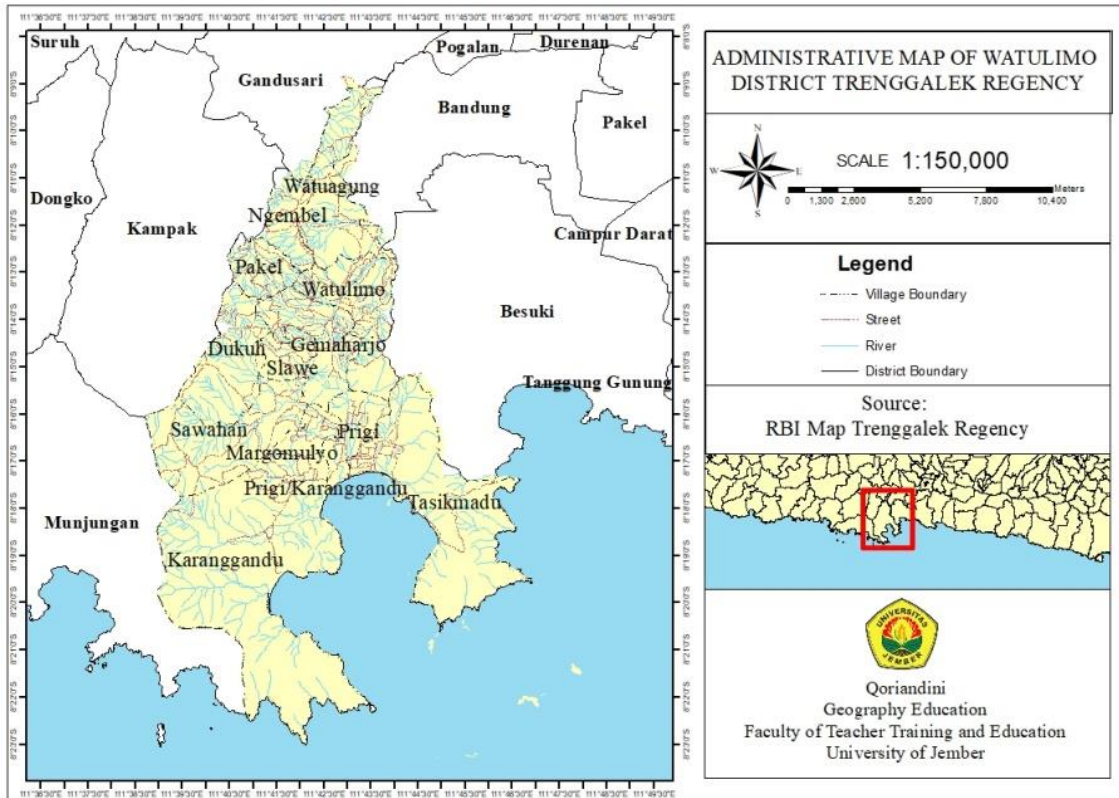
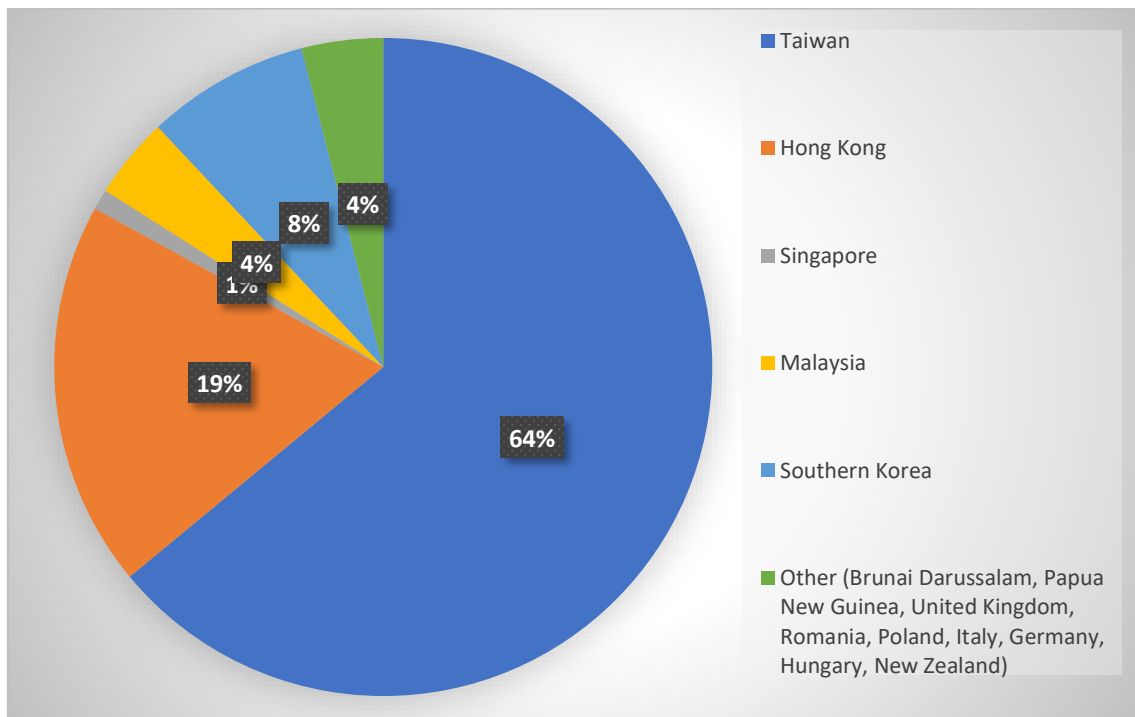**Figure 2. Administrative Map of Watulimo District, Trenggalek Regency**

Figure 3. Placement of Indonesian Migrant Workers from Trenggalek Regency

3.2.   Logistic Regression Model Calculation Results

3.2.1. Classification Table

Classification tables are another method for evaluating the predictive accuracy of logistic regression models. The observed values for the dependent outcome and the predicted values can be seen in this table. The classification results can be seen in Table 1.

Table 1. The Classification Results

		Precentace Correct
Y_International Migration	0	94.0
	1	96.0
Overall Precentage		95,0

Based on Table 1, the predictive power of the logistic regression model to predict the possible variables of International Migration (1) is 96.0%. This signifies that 121 respondents (96.0%) are predicted to carry out international migration (1) out of overall precentage of 95.2% respondents in the category of international migration (1). Further, the model prediction on the respondent who does not carry out international migration (0) is 94.0%, suggesting that as many as 78 respondents (94.0%) are predicted not to carry out international migration (0) from the total of 83 respondents. Therefore, the predictive power or accuracy of the logistic regression model in classifying its observations is 95.2%.

3.2.2. Likelihood Ratio Test

Simultaneous logistic regression testing in this research can be seen based on the Omnibus Test of Model Coefficient Table. The aim is to investigate the influence of independent variables on both the push and pull factors of migration with indicators of land ownership, lack of employment opportunities in the area of origin, the presence of disruptive pressure, marital status, the presence of disease outbreaks in area of origin, level of education, education, existence of social networks and the existence of desired employment opportunities in the destination area. The test results are presented in Table 2.

Table 2. Omnibus Tests of Model Coefficients

		Sig.
Step 1	Step	.000
	Block	.000
	Model	.000

Based on Table 2, the chi square model value is 210.141 with a significant value of 0.000. The significant value of 0.001 < 0.05 indicates that the indicators of X1 (land ownership), X2 (lack of employment in the home area), X3 (disruptive pressure), X4 (marriage status), X5 (existence of outbreaks), X6 (education), X7 (income), X8 (existence of social networks), and X9 (desired job opportunities in the destination area) simultaneously carry significant effects on the international migration variable (Y). Chi square is a statistical hypothesis test used in table analysis when the sample size is large. This test is used to test whether two categorical variables are independent in influencing the test statistics. If all three results show the same

value, it means they show less than 0.05, then they simultaneously have a significant effect on the dependent variable.

3.2.3. McFadden R-square Test

The coefficient of determination is carried out to see how much the dependent variable (migration) can be explained by the independent variables studied (push and pull factors for migration with indicators of land ownership, lack of employment opportunities in the area of origin, the presence of disruptive pressure, marital status, the presence of disease outbreaks in area of origin, level of education, education, existence of social networks and the existence of desired employment opportunities in the destination area). The results of this test based on the Nagelkerke R Square value can be seen in Table 3.

Table 3. Model Summary

Step	Nagelkerke R Square
1	.858

Based on Table 3, the Cox & Snell R Square value is 0.634. This shows that the effective contribution made by indicators X1-X9 in the destination area to the international migration variable is 63.4%. Furthermore, the Negelkerke R Square value in the regression model is 0.858, which means that the variance in variable Y that can be explained by the indicator is 85.8%, while the rest is influenced by other factors outside the model.

3.2.4. Goodness of fit Test

Testing the feasibility of the researcher's regression model used the Goodness of Fit Test which was measured based on the significance in the Hosmer and Lemeshow's Test table. If the Hosmer and Lemeshow's test value is equal to or less than 0.05 then hypothesis 0 is rejected, which means there is a significant difference between the model and the observed value. If the Hosmer and Lemeshow's Goodness of Fit Test statistical value is > 0.05 then the null hypothesis is accepted, which means the model is able to predict the observed value (Ghozali, 2016). The results of data processing can be seen in Table 4.

Table 4. Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	13.262	8	.103

As presented in Table 4, we obtained a 0.103 > 0.05 significance value from the model feasibility test. This score indicates the regression model's capacity to predict and match the observation data. Therefore, the regression model used in this study is suitable for further analysis, as there is no significant difference between the predicted classification and the observed classification.

3.2.5. Wald Test

This test was conducted to examine the effect of each independent variable on the dependent variable. The Wald test results are presented in Table 5. If the significance value

<0.05, then the independent variable affects the dependent variable. In contrast, if the significance value >0.05, then the independent variable presents no effects on the dependent variable. Partial test results can be seen in Table 5.

Table 5. Variables in the Equation

		B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1a	X1	1.449	.722	4.021	1	.045	4.258	1.033	17.546
	X2	.486	.725	.450	1	.502	1.626	.393	6.726
	X3	.136	.931	.021	1	.884	1.146	.185	7.108
	X4	.228	.489	.217	1	.641	1.256	.481	3.277
	X5	.780	1.020	.585	1	.444	2.182	.295	16.126
	X6	-.256	.477	.287	1	.592	.775	.304	1.971
	X7	.000	.000	34.077	1	.000	1.000	1.000	1.000
	X8	-.379	.946	.161	1	.689	.684	.107	4.369
	X9	3.179	1.122	8.033	1	.005	24.032	2.666	216.601
	Constant	-4.850	1.234	15.447	1	.000	.008		

a. Variable(s) entered on step 1: X1, X2, X3, X4, X5, X6, X7, X8, X9.

According to the test results presented in Table 5, the variables X2 (lack of employment in the home area), X3 (disruptive pressure), X4 (marriage status), X5 (existence of outbreaks), X6 (education), X7 (income), X8 (existence of social networks), and X9 (desired job opportunities in the destination area) have a significant influence on variable Y.

3.2.6. Logistic Regression Equation

The regression equation was formulated from the logistic regression analysis results shown in Table 5 in the β section. The equation can be explained as follows:

$$Ln \frac{p}{1-p} = -4,850 + 1,449\,X1 + 0,486\,X2 + 0,136\,X3 + 0,228\,X4 + 0,780\,X5 - 0,256\,X6 + 0,000\,X7 - 0,379\,X8 + 3,179\,X9 + e \qquad (4)$$

The above equation can be explained as follows: 1) According to the above regression equation, a constant value of -4.850 is obtained. This signifies, if the conditions of X1, X2, X3, X4, X5, X6, X7, X8, and X9 indicators are considered constant, then the resulting Y variable is -4.850. 2) The regression coefficient values on indicators X6 and X8 are negative, signifying the negative correlation of X6 and X8 indicators with variable Y. Thus, if indicators X6 and X8 decrease by one unit, the variable Y's regression coefficient also. 3) The positive regression coefficients on the indicators X1, X2, X3, X4, X5, X7, and X9 indicate a positive correlation between X1, X2, X3, X4, X5, X7, and X9 with variable Y. This means that if the indicators X1, X2, X3, X4, X5, X7, and X9 increase by one unit, the Y variable's regression coefficient will increase.

3.2.7. Odd Ratio

The obtained odds ratio values are shown in Table 5 in the Exp(β) section. The obtained odd ratio value indicates that the citizen owning land has a 4.258 times chance of undergoing international migration than those who do not have land.

Meanwhile, in the lack of jobs in the home village factor, the obtained odd ratio suggested that the likelihood of workers choosing to migrate abroad for that reason is 1.625 times higher than the likelihood that they will not do so for the same reason. The odd ratio for disruptive pressure indicates that the number of people who migrate to other countries due to the presence of disruptive pressure is 1.145 times higher compared to the absence of disturbing pressure.

The odd ratio value of the marital status showed that the people in Watulimo District, Trenggalek Regency, with marital status, are 1.256 times more likely to migrate to other countries compared to those who are single or not married. In the factor of the outbreak, the odd ratio shows that the number of people carrying out international migration is 2.181 times higher due to this factor. The odd ratio for the education factor shows that every time the increase of an individual's education level decreases the possibility of international migration in Watulimo District, Trenggalek Regency, by 0.774 times.

In the income indicator, the odd ratio indicates that the worker decides to migrate abroad due to this reason is one time higher than those who do not migrate because of income indicators. In the social network factor, the possibility of people's decisions to migrate internationally due to the social network is 0.684 higher than those who do not migrate due to social networks. In the factor of desired employment in the destination area, people who migrate due to this reason is 24.022 higher than the people who do not migrate due to the desired employment in the destination area.

3.3. Distribution of Migrant Workers' Home Village Based on Gender

This study also reported a map of the Indonesian migrant worker's distribution based on sex, as illustrated in Figure 4. From these results, the migrants are originally from all villages of the Watulimo Subdistrict. Figure 4 presents that there are 126 migrant workers from Watulimo District. In detail, from Sawahan Village, there are three male and seven female migrants, from Slawe Village three male and three female migrants, Gemaharjo Village six male and nine female migrants, from Watulimo Village seven male and 22 female migrants, from Pakel Village one male and four female migrants, from Ngembel Village four male and five female migrants, Dukuh Village two male and five female migrants, from Watuagung Village four male and thirteen female migrants, Karanggandu Village three male and four female migrants, Tasikmadu Village one male and three female migrants, Prigi Village three male and seven female migrants, Margomulyo Village three male and four female migrants. The obtained data signify that the majority of migrants from Watulimo District are women, with the highest number of migrants are from Watulimo Village, with a total of 29 migrants. Meanwhile, the least number of migrants is from Tasikmadu Village, with only four migrants. In total, there are 40 male and 86 female migrants from Watulimo District.
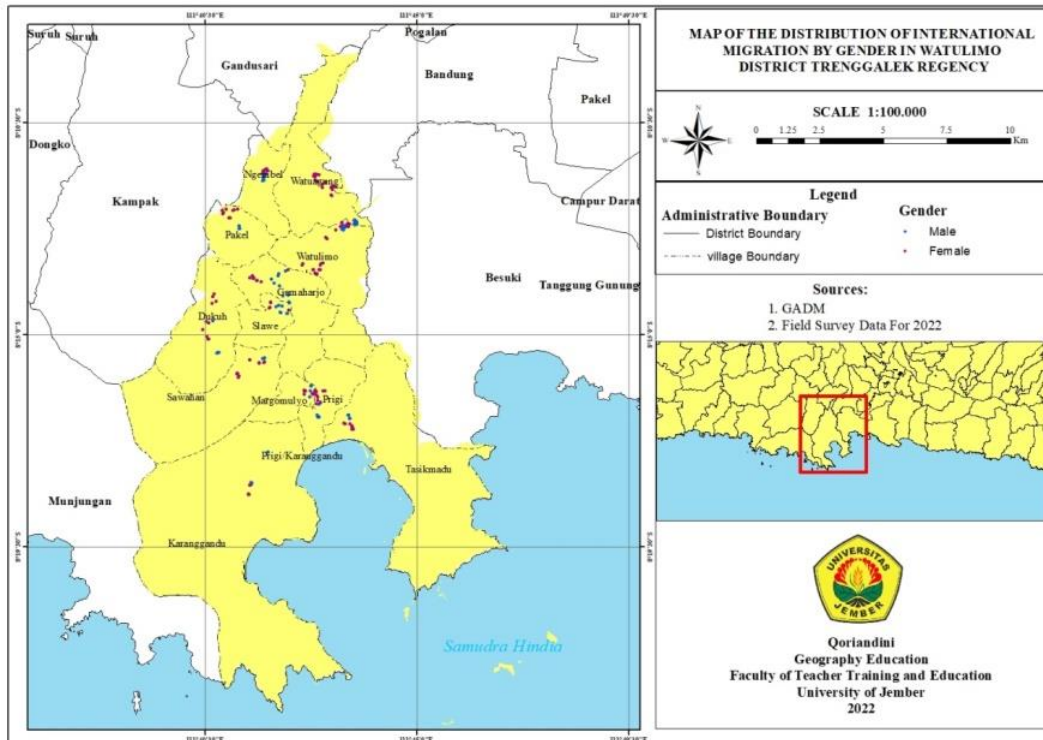
Figure 4. Map of The Distribution of International Migration by Gender

3.4. Analysis of the Distribution of International Migration Based on Migration Push and Pull Factors

Our data analysis results in the land ownership indicators are linear with the result reported by Syairozi and Wijaya (2020) that land ownership has a positive effect on workers' decisions to migrate internationally. This finding also corresponds with the real conditions in the Watulimo District. First, the agricultural land in Watulimo District has become increasingly narrow due to the conversion of agricultural areas into residential land. Second, some areas of the Watulimo Subdistrict still belong to the Indonesian National Army and Indonesian State Forest Company. Accordingly, the local people prefer having land in other areas, so those who no longer own land choose to seek other jobs outside of their home village. As for the respondents who still have land, they typically continue to work in their hometowns. They tend to continue working in their area of origin by cultivating their land, fields, gardens, or rice fields. Land ownership is the most dominant variable influencing the decision of workers to migrate internationally in Watulimo District, Trenggalek Regency.

Then, the indicator of the lack of jobs in the home village does not significantly influence the decision of workers to migrate internationally. This finding is in contrast with a previous study conducted by Irawaty and Wahyuni (2011) because the majority of migrant workers and people working in the home village had already had jobs previously. Therefore, it is difficult to identify the effects of employment status on the respondents' behavior patterns in migrating, especially for international migration.

Different from a previous study conducted by Suharto (2018), our results suggested that the disruptive pressure factor carries no significant influence on the workers' decision to

migrate abroad. Although its effect is not significant, several people migrate to other country due to the pressure from bullies. These respondents described that the pressure was mainly from neighbors and also their own families, prompting them to migrate internationally to improve their standard of living.

The results of logistic regression calculations show that marital status indicators carry no significant influence on the migrants' decision to migrate. The results of this study are different from the results of research conducted by Syairozi and Wijaya (2020), describing that marital status has a significant positive effect on the workers' decision to migrate. In this study, most of the people migrating to other countries and those working in their village have married. Therefore, the effects of marital status are less visible in the respondents' decision-making process. If a married couple work as international migrants, they both also fill out the provided questionnaire.

In the indicator of the outbreak, we also found no significant effects on the decision of workers to migrate internationally. This is inconsistent with research conducted by Livana, Suwoso, Febrianto, Kushindarto, and Aziz (2020), reporting that disease outbreaks in areas of origin caused migration flows. However, the two years of the COVID-19 outbreak in Indonesia bear a significant impact on the lives of the people of Watulimo Subdistrict who work, especially those working in the tourism sector, as the majority of people work in the tourist attractions areas in Watulimo. In detail, they work as traders or providers of boat rental services, banana boats, and speed boats. Due to the COVID pandemic, many tourist sites had to be closed for quite a long period of time, which impacted the residents working in the tourism sector. Consequently, some local people decided to be migrant workers because of the outbreak, but all of the employment companies were also closed due to the absence of flights abroad. Thus, some respondents stated that they could only go to the destination country around December 2022.

Then, the education level indicator also carries no significant influence on the decision of workers to migrate internationally. The results of this study are linear as the results of a study conducted by Wirastyani et al. (2016) uncovering that education level did not significantly influence the decision of workers to migrate internationally. Someone with a higher education level presents a greater level of mobility. This result is potentially affected by the similar education levels of our respondents who were migrant workers or those working in their home villages. Thus, education level presents less visible effects on the behavior patterns of respondents in migrating, especially international migration.

Additionally, income has a significant effect and has a positive coefficient on the decision of workers to migrate internationally. The higher income in the destination area is directly proportional to the probability of a worker's decision to migrate to another country and vice versa. Thus, the low income offered by the destination countries also reduces the possibility of people migrating. Further, the equal wage rate between the destination country and the home village stops the flow of mobility because the amount of wages covers the cost of labor mobility and the cost of living for their family in the home area.

In Watulimo Subdistrict, people earn different amounts of monthly income. Some people have high incomes, while others have low incomes. High and low income significantly affect the attitude, behavior, and life of a family. Our respondents declared that their family's low-income motivated respondents to migrate internationally in search of a higher income. Interestingly,

we also found respondents from high-income families who keep on migrating internationally because of their internal satisfaction with the job in the destination area. In addition to these reasons, respondents migrated internationally because of the low number of job opportunities in their home village places due to reduced agricultural land.

The existence of social networks has no significant influence on the decision of workers to migrate internationally. In contrast, Puspisanti (2014) uncovered that the existence of social networks positively and significantly affected people's decision to migrate internationally. Social networks will reduce social costs at the time of initial migration, such as getting to know new people and environments. Further, our data also suggested that some migrants move abroad because of their social networks, such as friends, family, or neighbors. However, there are similar numbers of respondents who have networks and those who do not have networks. Therefore, the effects of social networks are less visible in the behavior patterns of respondents in migrating.

The indicator of the desired employment in the destination country has a significant effect and positive coefficient on the decision of workers to migrate internationally. These findings support the results of research conducted by Wirastyani et al. (2016), describing that the desired job opportunities in the destination area positively affect the workforce's decision to migrate internationally. A similar phenomenon was observed in Watulimo District, where most of the respondents made international migration due to their wish to get a job in other countries, in addition to the convenience and facilities available abroad. These facilities are regarded as more attractive than their area of origin. Besides, they are also motivated by the greater wage from other countries.

4. Conclusion

The results of the study suggest that the migrant workers from Watulimo District originate from twelve villages with the five driving factors of migration, namely land ownership, lack of jobs in the area of origin, pressure from bullies, marital status, outbreaks in the area of origin, and level of education. We observed a significant effect of international migration in Watulimo District, Trenggalek Regency, from the indicator of land ownership, with a significant value of 0.045. Then, from the three factors that attract migration (income, existence of social networks, and the presence of desired jobs in the destination area), two indicators have a significant effect on the distribution of international migration in Watulimo District, namely the income indicator (sig. 0.000) and the presence of desired jobs (sig. 0.005). The findings from this study are expected to be applied in other areas with relatively similar characteristics. That way, we will generate generalizations for developing further knowledge. Further, the findings are expected to contribute in re-actualizing policies related to population and rural development.

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