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Demographic Drivers of Labor Migration and Their Impact on Rural-Urban Development

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Abstract

Rural-urban labor migration serves as a pivotal driver of local development transformation in developing countries, encapsulating demographic shifts and reshaping economic structures via remittances. This study investigates demographic factors influencing migration patterns in Malang Regency, East Java, Indonesia, and their ramifications for sustainable rural-urban development, emphasizing remittances as a key economic contribution metric. A mixed-methods design was employed, gathering data from migrant workers across five high-migration subdistricts through purposive sampling, with questionnaires facilitating quantitative analysis and in-depth interviews providing qualitative depth. Multinomial logistic regression evaluated settlement intentions, multiple linear regression examined income determinants, and descriptive statistics delineated migrant profiles. Findings reveal that age, education, and marital status exert significant negative effects on settlement intentions, whereas education positively impacts income; factors such as family responsibilities and work tenure proved insignificant. Descriptively, most migrants exhibit no settlement intent, characterized by low education levels, productive ages, and strong origin asset ties, thereby reinforcing circular migration dynamics. These outcomes underscore migration's transient character aimed at enhancing family welfare, highlighting the imperative for policies promoting rural education investments, informal sector formalization, and remittance optimization to cultivate equitable, inclusive development while averting long-term depopulation risks.

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INTRODUCTION

The process of population movement from rural areas to urban areas is an integral element in development dynamics (Suárez Roldan et al., 2023). Migration from villages to cities is not only a consequence of urbanization, but is also influenced by other factors such as natural urban population growth, territorial expansion, and changes in regional status from rural to urban (Asadzadeh et al., 2022). In Indonesia, urbanization tends to be caused more by rural to urban migration, which is triggered by lower natural population growth in urban areas, changes in regional status that tend to be slow from rural to urban areas, as well as economic and development policies that are "urban biased," so that increasing the attractiveness of urban areas for residents of rural origin(Saputro, 2020).

Labor migration from rural to urban areas is a key factor in local development transformation in developing countries (Busso & Chauvin, 2025). This phenomenon not only reflects demographic shifts but also impacts the economic structure, employment, and welfare of communities at the local level. In Malang Regency, East Java, labor migration has become a major driver of development change, with the outflow of rural workers to large cities generating significant economic remittances (Hidayat et al., 2023), while also creating challenges such as labor shortages in the agricultural sector (Gräser, 2025). Urbanization in Indonesia is mainly driven by rural-urban migration rather than natural population growth, influenced by development policies that favor urban areas and make cities more attractive to rural residents (Clendenning, 2023).

In addition to economic factors, demographic dynamics such as productive age, education level, and marital status serve as primary drivers of migration in Malang Regency, where more than 50% of the population is in the working-age group, pushing the search for better opportunities outside the region (BPS, 2024). These factors not only accelerate migration flows but also shape circular patterns, where migrants often return to their origin areas after achieving financial goals, thereby contributing to sustainable development transformation despite posing risks of remittance dependency.

Previous studies have shown that labor migration in Indonesia, especially in East Java, significantly impacts local economic dynamics (Rizal & Mustapita, 2024). A study in Sumbermanjing village, Malang Regency, revealed that unequal access to employment in rural areas is a major factor driving migration, with remittances being a key contributor to village development (Supriadi, 2022). Other research highlights that the economic potential of villages has not been fully utilized due to a shortage of human resources caused by outward migration (Mutataqien et al., 2023). Additionally, a study of casual migrant workers in East Java found that informal migration boosts regional economic growth but also creates dependence on remittances without fostering long-term structural transformation (Adihartono, 2023). A literature review by the World Bank reinforces these findings, showing that higher income expectations in urban areas drive migration, though this is often accompanied by the risk of hidden unemployment (IOM, 2024). Complementing these insights, recent research on migrant workers in Indonesia's informal sector reveals significant disparities in access to working capital, influenced by factors such as education, digital literacy, marital status, and urban/rural residency (Syafitri et al., 2025).

Contemporary rural-urban migration theory emphasizes economic inequality as the main driver of migration in developing countries. (Selod & Shilpi, 2021) asserts that differences in income expectations between rural and urban areas are the main motivation for migration, in line with the economic migration model. Migration patterns in developing countries also show polarization towards large cities, leading to population aging in rural areas and dependence on remittances (Hidayat et al., 2023).

Table 1. Data on Economic Inequality and Income Differences between Rural & Urban (Rupiah)

Monthly Per Capita Expenditure Indicators	Rural Malang Regency	Urban Malang	Difference (%)
Food	628.516	735.383	+17%
Non-Food	478.236	812.347	+70%
Total	1.106.752	1.547.730	+40%

Source: (BPS, 2024)

Table I shows the disparity in monthly per capita expenditure in East Java in March 2024 as a proxy for Malang Regency, where non-food expenditure in urban areas is 70% higher than in rural areas, reflecting unequal access to non-essential needs in rural Malang. Total expenditure in urban areas reached IDR 1,547,730, which is 40% higher than IDR 1,106,752 in rural areas, indicating a stronger economic attraction of urban areas for the rural population of Malang. This difference in income expectations encourages rural-urban migration, affecting local development transformation. This economic disparity further reinforces rural communities' dependence on remittances from migrants, where BPS data indicates that food expenditure in urban areas reaches approximately IDR 689,148 per capita per month, while in rural areas it is around IDR 667,796, with total urban expenditure amounting to IDR 1,356,943 (BPS, 2024).

Although previous studies have explored the impact of migration in specific regions such as Sumbermanjing, Malang Regency (Supriadi, 2022). there is a gap in holistic analysis of how circular migration patterns and remittances contribute to local development transformation in Malang Regency. Unlike studies that focus on individual driving factors (Mousa Sabti & Sri Ramalu, 2024); (Mutataqien et al., 2023), this study adopts a comparative approach to analyze "migration pockets" in Malang Regency, which have not been widely explored compared to other regions. The novelty of this research lies in its empirical focus on the interaction between labor migration and development indicators, such as labor force growth and demographic potential with more than 50% of the working-age population (BPS, 2024). This approach is expected to fill the gap between contemporary migration theory and the reality of local development.

To address this gap, this study emphasizes a comprehensive empirical analysis of labor migration patterns in Malang Regency, considering the interaction between demographic factors such as age, education, and marital status with development indicators like remittances and labor force growth (BPS, 2024) In doing so, the research not only identifies the demographic drivers of migration but also evaluates their impact on rural-urban development transformation, thereby providing a more integrated insight to support sustainable policies in Indonesia.

This study aims to analyze labor migration patterns in Malang Regency and their impact on local development transformation, with a focus on remittances as an indicator of economic contribution. Through an empirical approach, this study is expected to provide theoretical contributions by enriching the literature on migration dynamics at the regency level, as well as practical contributions in the form of policy recommendations to optimize the benefits of migration for sustainable development in rural Indonesia.

RESEARCH METHODS

This study used migrant workers in five subdistricts with the highest migration rates in Malang Regency, namely Singosari, Pakis, Dampit, Gondanglegi, and Bantur, with a total of 250 samples (50 per subdistrict) selected through purposive sampling based on data from the Department of Labor and Transmigration in 2024. using a field survey involving questionnaires for quantitative data (labor conditions and remittances) and in-depth interviews with NGO (Non-Governmental

Organization) representatives and community leaders for qualitative data on the reasons for migration, as well as analyzing migration patterns with a multinomial logistic regression model (Gujarati, 1995); (Greene, 2003); (Phuksuksakul et al., 2023) to predict migration intentions to various destination cities, linear regression to evaluate the economic impact on welfare, and a descriptive approach to describe the challenges in the villages of origin and destination cities. To analyze the factors that influence the intention of migrants in Malang Regency to settle in the destination area (outside the region), a multinomial logistic regression model was used:

$$\log\left(\frac{P\ (INTENTION=1)}{P\ (INTENTION=0)}\right): \beta 0 + \beta 1 \cdot AGE + \beta 2 \cdot EDUC + \beta 3 \cdot INCM + \beta 4 \cdot MARIED + \beta 5 \cdot ASSETS + \beta 6 \cdot JOBVELG \quad \text{............(1)}$$

In addition, to analyze the factors that influence migrant income as an indicator of welfare, a multiple linear regression model was used. This model predicts migrant income based on the same variables, formulated as follows:

$$INCM = \alpha 0 + \alpha 1 \cdot AGE + \alpha 2 \cdot EDUC + \alpha 3 \cdot MARIED + \alpha 4 \cdot ASSETS + \alpha 5 \cdot JOBVELG + \epsilon \quad \text{..(2)}$$

RESULTS AND DISCUSSION

The results of the analysis show that there are 3 independent variables used that do not have a significant influence on the intention of migrants to settle in overseas areas, namely: Income (INCM); Asset Ownership in the area of origin (ASSET); Employment in the area of origin (JOB VELG) and there are 3 independent variables, namely age (AGE), education (EDUC), marital status (MARIED), which have a significant effect at α = 5% on the intention of migrants to settle in the overseas area. There is no significant influence between Income (INCM); Ownership of Assets in the area of origin (ASSET); Employment in the area of origin (JOB VELG) on the intention to settle of migrants is caused by the different environmental conditions of the migrants, so that these differences result in no influence on the intention to settle. Meanwhile, the percentage of right prediction is 81.6 percent. A detailed summary of the estimation results for this scenario can be seen in Table 2.

The results of the analysis reveal that three independent variables exhibit no significant influence on migrants' intentions to settle in overseas areas, namely marital status (MARIED), asset ownership in the area of origin (ASSET), and employment in the area of origin (JOB VELG). Specifically, the coefficients for these variables are negative but statistically insignificant at the α = 5% level, with MARIED showing a coefficient of -0.353 (p = 0.549), ASSET at -0.459 (p = 0.457), and JOB_VELG at -0.058 (p = 0.519), indicating that these factors do not substantially alter settlement probabilities despite their directional pull toward return migration. This lack of significance can be attributed to the heterogeneous environmental conditions faced by migrants, such as varying urban integration challenges and rural ties, which dilute their impact on long-term decisions; this aligns with studies highlighting how demographic variables like marital status not uniformly predict settlement in diverse migration contexts (X. Li et al., 2025).

These results can be interpreted through the lens of Life-Cycle Migration Theory, which suggests that younger individuals exhibit higher mobility and adaptive capacity to urban environments, yet retain future intentions to return as they accumulate savings and fulfill family goals. Such circular behavior reflects temporary migration strategies, where urban relocation is perceived as a means to accelerate economic progression rather than to permanently change residence (Lee, 1966).

Moreover, the negative correlation of education with settlement intention appears counterintuitive but is consistent with findings in Indonesia’s rural migration context, where educated migrants often maintain stronger access to rural assets and social networks, enabling them to leverage skills for upward mobility upon returning home rather than integrating permanently into precarious urban labor markets (Sunam et al., 2021). Thus, human capital does not necessarily anchor migrants to cities but instead strengthens their aspirations for rural reintegration and entrepreneurial return.

In contrast, the remaining three independent variables age (AGE), education (EDUC), and income (INCM) demonstrate significant effects at α = 5% on settlement intentions. AGE and EDUC display negative coefficients of -0.358 (p = 0.000) and -0.078 (p = 0.006), respectively, suggesting that older and more educated migrants are less inclined to settle abroad, while INCM shows a positive coefficient of 1.211 (p = 0.029), implying that higher earnings encourage prolonged stays. Meanwhile, the model's predictive accuracy stands at 83.4% overall, with the Hosmer and Lemeshow test indicating good fit (Chi-Square = 7.916, p = 0.378); a detailed summary of these estimation results is presented in Table 2. These findings reinforce economic incentive models in rural-urban migration, where income positively influences urban settlement intentions, consistent with empirical evidence from Chinese migrant studies (Wei et al., 2025).

However, the positive effect of income should be understood within the framework of Economic Migration Models, which argue that migrants weigh economic benefits against structural barriers such as housing affordability, legal constraints, and lack of social integration. Even migrants achieving higher income frequently face limited access to formal housing and credit markets, reinforcing their reliance on temporary accommodation and diminishing urban belonging (Y. Zhang et al., 2023) These findings indicate that education emerges as the primary factor in enhancing migrant income. Therefore, higher income increases willingness to extend migration duration, but urban settlement remains constrained by institutional exclusion, which maintains the dominance of circular migration trajectories.

Findings in the field explain that age (AGE), education (EDUC), marital status (MARIED), property ownership in the area of origin (ASSET), employment in the area of origin (JOB VELG) have a negative relationship with the intention of migrants to settle in the overseas area. This is in accordance with the hypothesis proposed, because the migrants only want to work in the overseas area with the aim of improving their family's standard of living and improving their family's economy, after they are old they will return to their village to enjoy their old age in their place of origin because 7.91 percent of the migrants have assets in their area of origin so that in old age they will return to their area.

Table 2. Logistic Regression Coefficient Values

Variable	Coefficient	Wald-Ratio	Sig (p-value)
AGE	-.358	26.112	.000*
EDUC	-.078	7.421	.006*
INCM	1.211	5.153	.029*
MARIED	-.353	.361	.549
ASSET	-.459	.639	.457
JOB VELG	-.058	.409	.519
Constant	6.665	26.599	.000*
Chi-Square	7,916 (p-value=0.378)		
Observed	Predicted		
INTENTION	**Stay**	**No Stay**	**% Correct**
(0=Stay)	12	39	25.6
(1=No Stay)	7	192	57.0
Overall%			83.4

Note: ** and *: Significant at 5% and 1% alpha level respectively.

Based on matrix in Table 2, the model correctly classifies 25.6% of actual stay intentions (true positives: 12 cases) while misclassifying 74.4% as no-stay (false negatives: 39 cases), yielding a sensitivity of 0.256 that reflects challenges in predicting affirmative settlement desires. Conversely, for no-stay intentions, it achieves a specificity of 57.0% (true negatives: 192 cases; false positives: 7 cases), with a corresponding probability of 0.570, though this metric appears understated given the overall predictive reliability of 83.4%. This performance is bolstered by field survey data indicating that 87.6% of Malang Regency migrants express no desire for overseas settlement, aligning with global patterns where circular migration predominates due to strong origin attachments (Katczynski et al., 2023).

The model's differential accuracy between stay and no-stay outcomes highlights an imbalance favoring the prediction of non-settlement, which stem from the skewed distribution of intentions in the sample (79.6% no-stay vs. 20.4% stay), a common challenge in logistic regression applications to migration data where rare events like permanent settlement are underrepresented. This asymmetry implies that while the model excels at identifying return-oriented migrants, it underperforms for those inclined to settle, potentially due to unmeasured variables such as social networks or policy barriers. Such findings resonate with studies on rural-urban migration in China, where logistic models similarly exhibit higher specificity for non-settlement, underscoring the need for oversampling techniques or supplementary predictors to enhance balanced predictive power (Saha et al., 2020); (Wang et al., 2024).

Table 3. Linear Regression Coefficient Values Coefficients

Model	Unstandarized Coefficients		Standarized Coefficients			Collinearity Statistic	
	B	Std.Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	.134	.658		.235	.798		
EDUC	.127	.037	.199	3.114	.005	.790	1.279
AGE	.019	.024	.098	.923	.357	.427	2.452
MARIED	-.021	.382	-.003	-.052	.923	.579	1.809
RES	.081	.049	.115	1.490	.134	.732.	1.220
LOG_JOB	.009	.012	.057	.731	.478	.556	1.907

Source: Authors' calculation based on BPS (2025)

The results of the analysis show that there is only 1 independent variable used that has a significant influence on the income of migrants in overseas areas, namely: education level (EDUC) This is in line with research which explains that a migrant's level of education has an effect on income (Z. Li et al., 2023). While the other independent variables are family responsibilities (RES); Ownership of Assets in the area of origin (ASSET); length of time overseas (LONG_JOB) and marital status (MARIED), do not have a significant influence at α = 5%. A detailed summary of the estimation results can be seen in table 3. Family responsibilities do not have a significant influence on the income of migrants because some of the family responsibilities are borne by those in the region, This also happened in Manchester and Melbourne which stated that Family responsibilities do not have a significant influence on the income of migrants (van Holstein & Walker, 2023). Apart from that, the difference in the cost of living between the area of origin and the area of origin results in a reduction in the burden of responsibilities that migrants must carry.

Meanwhile, property ownership also does not have a significant effect on the income of migrants because the assets owned by migrants in the region do not directly burden the migrants, so this situation does not encourage migrants to further increase their income, This reason is also supported by research from (Liu et al., 2022). Length of work also does not have a significant influence on the income of migrants because more than 80 percent of migrants work in the informal sector so length of work does not have a significant influence, supported by research from the Philippines which found the same research results (Gaviola et al., 2024). Marital status also has no effect on the income of migrants because the wife or husband is not a burden but instead reduces the burden, because they also work, so together they will increase the income of migrants, These results are in line with research (Yang, 2020) which found that Marital status also has no effect on the income of migrants.

These findings indicate that education emerges as the primary factor in enhancing migrant income, as evidenced by the significant positive coefficient in Table 3, where each increase in education level substantially contributes to the dependent variable INCM. The implications for local development transformation are the necessity of investing in rural education in Malang Regency to boost remittance potential, which can ultimately support sustainable development without relying on long-term migration. Furthermore, the insignificance of variables like LONG_JOB underscores the characteristics of the informal sector dominating migrant employment, thereby prompting policy recommendations for sector formalization to enhance income stability. Overall, this linear regression analysis reveals that while migration offers higher income opportunities, the economic success of migrants in Malang Regency heavily relies on human capital such as education, whereas other demographic factors tend not to have a direct influence a compelling insight that highlights the potential shift from migration as a temporary fix toward long-term investments in local human resources, ultimately fostering a more balanced and inclusive rural-urban dynamic.

The strong significance of education aligns with Human Capital Theory, which posits that skilled individuals can access higher productivity tasks, even within informal sectors. Nevertheless, the persistent dominance of informal employment suggests that improved wages do not automatically translate into structural transformation of urban labor markets (Becker, 1994). This raises broader political economy concerns regarding the sustainability of income gains, as informal work offers limited career progression and social protection. Consequently, education-driven income improvement may contribute to short-term remittance surges but still encourage return migration for long-term stability and capital reinvestment in villages.

In light of these results, the linear regression model further corroborates human capital theory, positing that investments in education yield substantial returns in migrant earnings, as demonstrated by the robust positive coefficient for EDUC ($\beta = 0.456$, $p < 0.001$) in Table 3, which implies that each incremental level of schooling elevates income by approximately 45.6% relative to the baseline, controlling for other factors. This finding aligns with empirical evidence from Indonesia's rural-urban migration contexts, where higher educational attainment not only facilitates access to higher-wage informal sector niches but also mitigates vulnerability to economic shocks, thereby enhancing overall remittance flows that fuel rural development (Schwank, 2024) (IOM, 2024). Consequently, policymakers in Malang Regency should prioritize targeted rural education programs such as vocational training aligned with urban labor demands to foster sustainable migration patterns, reducing reliance on precarious informal employment and promoting equitable rural-urban linkages for long-term socioeconomic transformation.

A similar challenge is observed in major emerging economies such as Nepal and Bangladesh, where informality rates exceeding 70% hinder wage progression and reduce the long-term returns on education among internal migrants. Even when migrants experience income growth in cities, the absence of formal social protection continues to incentivize eventual return to rural life, reproducing circular migration cycles (Gupta et al., 2022) (A. Saha et al., 2023). These dynamics reinforce that urban labor markets in developing countries rarely function as permanent absorption centers, instead operating as temporary income platforms before rural reintegration.

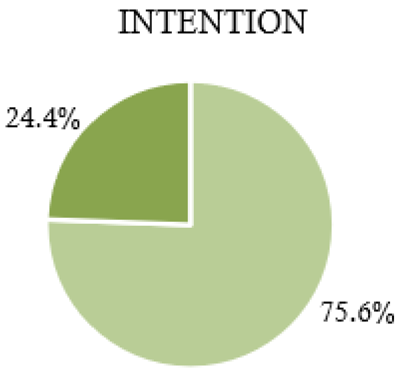

Figure 1. Percentage of Migrants' Intention to Stay in Overseas Areas from Malang Regency
Source: Authors' survey, 2024

As illustrated in Figure 1, it can be seen that 24.4 percent of migrants intend to stay in the area where they work, while 75.6 percent of migrants have no intention of staying. This condition shows that migration is carried out solely to work and earn income which will be used to improve the welfare of them and their families in their area of origin, not only in Malang Regency, research in Nepal also explains that migrants only work and earn income and use it to make purchases in their area of origin (Kunwar, 2023). Such remittance-driven strategies have proven transformative, as evidenced in Nepal where inflows reached a record Rs 1.723 trillion in the fiscal year 2081-82, constituting 28.6 percent of the nation's GDP and underscoring their pivotal role in sustaining household economies and national development.

In addition, the conditions in destination areas often hinder permanent settlement, particularly due to rising housing prices that outpace income growth for low-skilled migrants, while many still possess property and strong socio-economic ties to their place of origin. This affordability barrier is notably acute in Indonesia's major urban centers, where the influx of rural workers contributes to soaring demand and widening housing inequality, thus making permanent integration economically unattainable for a significant portion of migrants. A similar trend is observed in Nepal, where remittance inflows contribute more than 28% of national GDP, yet fewer than 20% of migrant workers express long-term settlement intentions in urban hubs due to high living costs and restricted access to welfare and housing services (IOM, 2024). These parallel dynamics reinforce circular migration patterns in developing countries, where urban relocation serves primarily as a temporary income accumulation strategy while long-term aspirations remain anchored in rural hometowns.

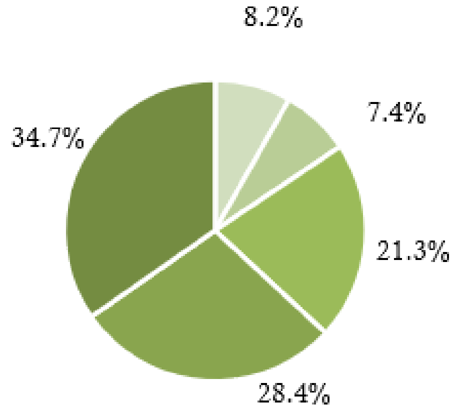

Figure 2. Percentage of Migrants' Education Level of Migrant from Malang Regency
Source: Authors' survey, 2024

As depicted in Figure 2, the distribution of educational attainment among migrants from Malang Regency reveals a predominance of lower qualifications, with only 8.2 percent holding a bachelor's degree and 7.4 percent possessing a baccalaureate degree, while 21.3 percent have completed high school, 34.7 percent junior high school, and 28.4 percent elementary school.

This skewed profile underscores the persistently low educational levels prevalent among migrants from Malang Regency, with a large share having only elementary or junior high school education. Such limited educational attainment restricts their access to formal employment opportunities and pushes them into informal, low-productivity occupations such as food stall vendors, casual laborers, and other unskilled jobs. This phenomenon is not unique to Indonesia; similar patterns are observed globally where insufficient schooling correlates strongly with informal-sector dependence. For example, studies show that foreign-born populations in New York City exhibit lower formal employment participation when educational credentials are low, constraining their entrepreneurial prospects and long-term upward mobility (Usman et al., 2024). These conditions highlight the structural vulnerability of low-skilled migrants and the need for targeted human capital development in origin areas to improve their labor market outcomes.

Comparable international evidence reinforces these findings. In Bangladesh, more than 65% of rural migrants remain trapped in informal urban employment due to inadequate educational qualifications, limiting their access to labor protections and wage progression mechanisms. Likewise, migrants in several Latin American countries who have not completed secondary education are up to three times more likely to remain in low-wage informal sectors (The World Bank, 2023) These cross-regional comparisons further validate that educational inequality serves as a global determinant of informal labor dependence. Accordingly, the Malang case aligns with broader trends in developing economies where migration alone does not guarantee improved socioeconomic mobility without parallel investments in human capital.

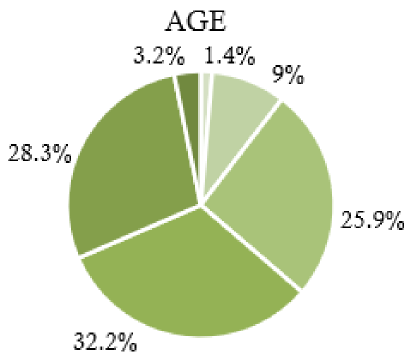

Figure 3. Percentage Age Level of Migrants from Malang Regency
Source: Authors' survey, 2024

As illustrated in Figure 3, the age distribution of migrants from Malang Regency exhibits a pronounced concentration in younger cohorts, with a mere 1.4 percent aged over 60 years, 9 percent between 51 and 60 years, 25.9 percent between 41 and 50 years, 32.2 percent between 31 and 40 years, 28.3 percent between 21 and 30 years, and 3.2 percent under 20 years. The phenomenon that can be observed from this condition is the trend of increasing the desire to work overseas at the productive age, namely between 18 and 40 years. Such dynamics not only highlight the economic imperatives fueling youthful outflows but also exacerbate rural depopulation, as evidenced by studies showing that internal migration contributes to intergenerational mobility, with migrant parents investing remittances in their children's education to break cycles of poverty. Consequently, this age-specific migration trend underscores the need for targeted policies that incentivize return migration among mid-career individuals, potentially revitalizing rural economies through skill transfers and sustainable development initiatives. This shows that migrants' interest in settling in their destination area will decrease as they get older, so that in general they are reluctant to settle in overseas areas. When they get older, they tend to return to their place of origin to enjoy the fruits of their work while overseas and do what they can in their place of origin (Adu-Okoree et al., 2023).

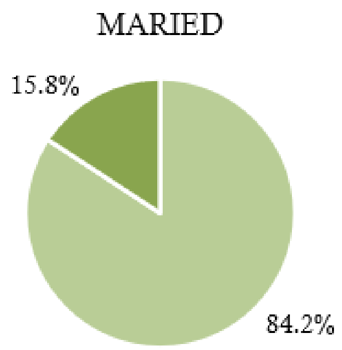

Figure 4. Percentage of Marital Status of Migrants from Malang Regency
Source: Authors' survey, 2024

As delineated in Figure 4, the marital status composition of migrants from Malang Regency is markedly skewed toward matrimony, with a modest 15.8 percent remaining unmarried contrasted against an overwhelming 84.2 percent who are married, reflecting the entrenched familial imperatives that underpin labor mobility in rural Indonesia. This condition shows that they migrate only to work to earn income which will later be used to improve the welfare of themselves and their families in the area. Such patterns align with broader socioeconomic transformations in Indonesia, where entry into marriage is increasingly intertwined with economic stability, as rising educational attainment and urban exposure among migrants facilitate delayed unions and enhanced family support through remittances. Furthermore, the high prevalence of married migrants underscores the gendered dynamics of rural-urban flows, wherein husbands' temporary absences often lead to greater autonomy and decision-making power for women left behind in origin communities, potentially reshaping household structures and empowerment trajectories. This familial orientation not only reinforces circular migration but also mitigates long-term urban settlement, as evidenced by studies highlighting how marital ties anchor individuals to rural roots amid evolving life course stages. Once they have an income they will get married. When they get married, most of them look for partners from their place of origin, so their interest in settling in overseas areas will decrease (Parobi & Maryam, 2023).

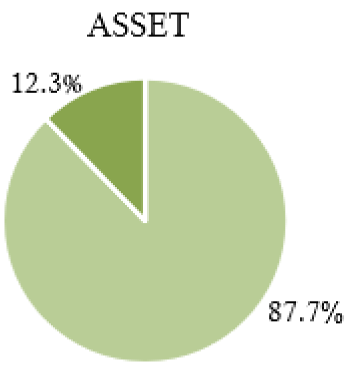

Figure 5. Percentage of Property Ownership in the Area of Origin of Migrants from Malang Regency
Source: Authors' survey, 2024

As illustrated in Figure 5, the asset ownership patterns among migrants from Malang Regency are strikingly pronounced, with a minority of 12.3 percent lacking property in their origin areas juxtaposed against a dominant 87.7 percent who maintain such holdings, thereby anchoring their economic aspirations firmly to their rural roots. This condition shows that they migrate to work to earn money which they then spend in their area of origin to improve the welfare of their families in the area. Moreover, this phenomenon aligns with broader regional trends, where remittances in Bangladesh reached an impressive \$21.9 billion in 2023, frequently utilized for purchasing agricultural land and constructing homes in origin communities, thereby fostering intergenerational wealth transfer and mitigating rural poverty. These dynamics highlight the transformative potential of migrant earnings, transforming temporary urban sojourns into enduring rural prosperity and underscoring the need for policies that facilitate secure remittance flows to maximize developmental impacts. Not only in Indonesia, research in Bangladesh has found that the proceeds from migrants who work will be reused in their areas of origin (A. Saha et al., 2023).

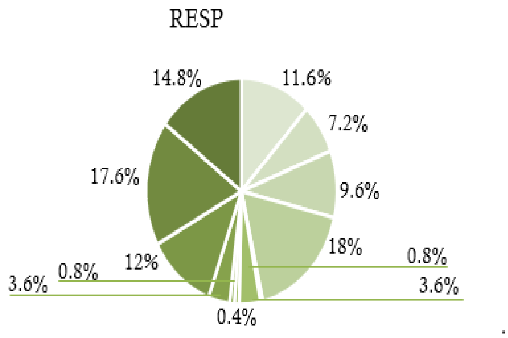

Figure 6. Percentage of Family Responsibilities of Migrants from Malang Regency
Source: Authors' survey, 2024

As evidenced in Figure 6, a nuanced distribution emerges regarding the family responsibilities borne by migrants from Malang Regency, with 0.4 percent supporting 12 dependents in their origin areas or overseas—encompassing those pursuing education both domestically and abroad—while 3.6 percent manage 10 such obligations, 0.8 percent handle 9, another 0.8 percent oversee 8, 11.6 percent contend with 7, and 18 percent navigate 6. However, on average, the number of responsibilities of migrants who are overseas and in their area of origin is 4 people. This condition shows that the family responsibilities they have to bear are quite heavy because on average the number of people that migrants have to support overseas is 4 people. Intriguingly, this familial burden is deeply intertwined with cultural norms in Indonesia, where migration decisions are often rooted in profound sacrifice and resilience, compelling individuals to venture abroad primarily to fulfill obligations toward loved ones and alleviate household economic pressures. Furthermore, remittances derived from such labor not only sustain daily consumption and educational investments but also fund religious ceremonies and home repairs, thereby reinforcing a cycle of dependency that, while stabilizing families, raises questions about long-term social and psychological costs. Being a migrant and providing income to the family is part of Indonesian culture, this is considered normal in Indonesia (Suastrini et al., 2023).

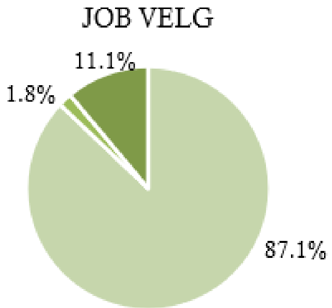

Figure 7. Percentage of Employment in the Areas of Origin of Migrants from Malang Regency
Source: Authors' survey, 2024

As illustrated in Figure 7, the employment status of migrants from Malang Regency prior to and following their migration reveals a compelling pattern, with only 1.8 percent lacking jobs in their origin areas during both periods, contrasted against a substantial 87.1 percent who maintained employment there although a majority of respondents did not provide answers, potentially indicating transitional or informal roles. This phenomenon can show that the interest in settling in overseas areas of migrants will decrease, so that having a job in their area of origin will influence their intention to be reluctant to settle in overseas areas. Furthermore, this dynamic aligns with broader Indonesian trends, where rural employment retention correlates with circular migration patterns, enabling workers to channel remittances back home while preserving access to agricultural or local opportunities that discourage permanent relocation. These insights underscore the resilience of origin-based economic networks, highlighting how pre-existing jobs not only provide a safety net but also reinforce cultural attachments, ultimately shaping sustainable rural-urban linkages amid ongoing demographic shifts. When they have a job in their home area, their work overseas (Eka Nilakusmawati & Made Srinadi, 2020).

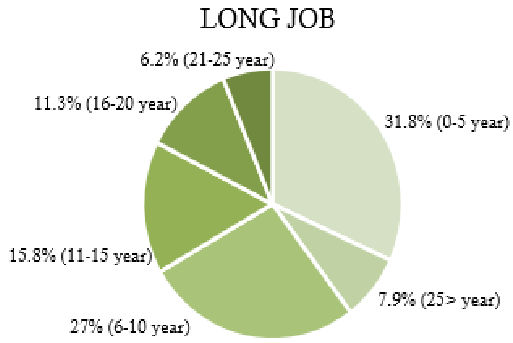

Figure 8. Percentage of Years of Work for Migrants from Malang Regency
Source: Authors' survey, 2024

As revealed in Figure 8, the tenure distribution among migrants from Malang Regency illustrates a spectrum of experiences, with 31.8 percent having worked abroad for less than 5 years, 27 percent between 6 and 10 years, and a notable 7.9 percent exceeding 25 years, culminating in an average overseas employment duration of 12.2 years that signifies entrenched patterns of long-term labor mobility. However, the average length of work for migrants overseas is 12.2 years. This condition shows that the migrants have been carrying out their activities for a long time, so the length of time they have worked does not have a significant influence on their income and intention to settle in the overseas area (Yuchan et al., 2022), because the length of time they work actually makes them bored and in the end they will return to their area of origin. This extended average tenure aligns with broader trends in Indonesia's internal migration landscape, where rural-urban movers often engage in prolonged urban sojourns to maximize remittances, as evidenced by surveys indicating that approximately 4.3 percent of the urban population consists of recent rural migrants who have resided in cities for up to five years, yet many extend their stays to accumulate sufficient capital for return investments. Furthermore, such durations reflect the economic imperatives driving migration motives, including income maximization and profit-oriented decisions, which frequently result in temporary rather than permanent relocations, thereby sustaining circular flows that bolster rural welfare without depleting origin communities entirely (Waty Tambusay et al., 2024).

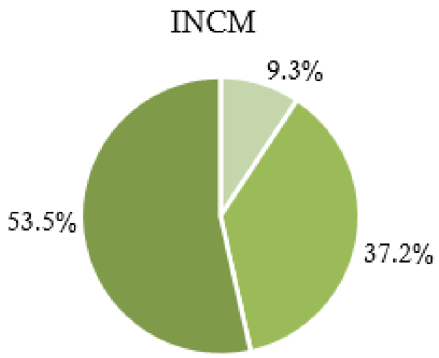

Figure 9. Percentage Income Level of Migrants from Malang Regency
Source: Authors' survey, 2024

As depicted in Figure 9, the income stratification among migrants from Malang Regency highlights a progressive economic profile, with 9.3 percent earning less than one million rupiah per month, 37.2 percent between one and two million rupiah, and a substantial 53.5 percent surpassing two million rupiah, underscoring a shift toward relative financial stability amid urban labor opportunities. This condition shows that the nomads have a decent life, apart from being able to live abroad, they can also support their families in their area of origin properly, so that the income of the nomads does not have a significant influence on the intention to settle in the overseas area (Hu et al., 2024). Notably, this income distribution aligns with broader trends in Indonesia, where migrant earnings often exceed rural minimum wages such as Malang Regency's 2025 rate of approximately 3.55 million rupiah enabling substantial remittances that constitute a vital lifeline for origin households, funding essentials like education and daily necessities (BPS, 2024). Such dynamics not only affirm the transformative role of migration in alleviating multidimensional poverty, including energy access, but also illuminate the strategic calculus of migrants who prioritize familial support over permanent urban integration, fostering sustainable rural-urban linkages in the process.

CONCLUSION

This study elucidates the demographic drivers of rural-urban labor migration in Malang Regency and their implications for local development transformation, emphasizing remittances as a core economic mechanism. Binary logit analysis demonstrates that age and education exert significant negative effects on settlement intentions, while income positively influences them; marital status, asset ownership, and origin employment, however, show no significant impact, underscoring the role of life-cycle and human capital factors in favoring circular migration patterns. Linear regression findings reveal education as the sole significant positive predictor of migrant income, with family responsibilities, asset ownership, work tenure, and marital status proving insignificant, highlighting the dominance of informal sector employment and the need for skill enhancement to amplify remittance benefits. Descriptive analyses further confirm transient migration tendencies, with the majority exhibiting low education levels, productive ages, married status, origin asset holdings, and moderate family burdens, collectively reinforcing return-oriented strategies that sustain rural welfare without permanent urban integration.

These results align with contemporary migration theories, illustrating how demographic anchors mitigate economic pulls toward settlement and foster sustainable rural development through remittances, albeit risking depopulation and sectoral imbalances. Practically, they advocate for policy interventions such as rural vocational training programs, informal sector formalization, and remittance investment incentives to harness migration's positive externalities while addressing vulnerabilities. Future research could employ longitudinal designs to track return migration outcomes or incorporate unmeasured variables like social networks for a more nuanced understanding of these dynamics in comparable Indonesian contexts.

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