

## PENEMUAN AWAL MENGENAI KESAN SOSIOEKONOMI DAN CORAK MIGRASI JALAN BERTURAP MARUDI-MIRI.

*The Initial Findings on the Socioeconomic Impacts and Migration Patterns of the Marudi-Miri Tar-Sealed Road.*

BEMEN WIN KEONG WONG<sup>1</sup>, KEELBISAS MIKA MUS<sup>2</sup>, & REGINA GARAI<sup>3</sup>

<sup>1,2,3</sup> Universiti Malaysia Sarawak, Faculty of Social Sciences and Humanities, 94300 Kota Samarahan, Sarawak

\*Corresponding author: wwkbemen@unimas.my

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**ABSTRAK** *Kajian ini menyelidiki kesan sosioekonomi jalan berturap yang menghubungkan Marudi ke Bandar Miri di Sarawak, Malaysia. Sebelum tahun 2005, Marudi terputus dari Bandar Miri melalui jalan darat, bergantung sepenuhnya pada bot ekspres dan penerbangan untuk keperluan pengangkutannya. Pembinaan jalan pembalakan pada tahun 2005 dan menaiktaraf kepada jalan berturap pada tahun 2019 telah meningkatkan aksesibiliti dengan ketara. Penyelidikan kualitatif ini menggunakan pensampelan bertujuan dan menggunakan temu bual separa berstruktur dengan 20 penduduk tempatan untuk meneroka kesan jalan tersebut. Penemuan menunjukkan empat kesan sosial dan ekonomi utama. Jalan berturap yang baharu ini telah menyenangkan pengangkutan pesakit ke hospital, menjadikan perjalanan antara Marudi dan Miri lebih mudah. Akan tetapi, ciri-ciri jalan yang sempit dan berbukit telah menimbulkan kebimbangan keselamatan pengguna. Walaupun terdapat peningkatan dalam aksesibiliti, faktor utama yang mempengaruhi keputusan migrasi adalah peluang ekonomi. Dari segi ekonomi, jalan tersebut telah mengubah tingkah laku pengguna, menyebabkan peningkatan pembelian di Miri dan menimbulkan cabaran bagi perniagaan tempatan. Ia juga telah merangsang perkembangan perniagaan baharu, termasuk kedai rangkaian nasional dan perusahaan tempatan. Kajian mendapati bahawa walaupun jalan berturap telah meningkatkan aksesibiliti, ia tidak memberi kesan yang ketara terhadap keputusan migrasi penduduk tempatan. Sebaliknya, peluang pekerjaan adalah faktor utama migrasi.*

**Kata Kunci:** *Pembangunan luar bandar, jalan luar bandar, migrasi, kesan sosioekonomi*

**ABSTRACT** *The study investigates the socioeconomic impacts of the tar-sealed road connecting Marudi to Miri City in Sarawak, Malaysia. Before 2005, Marudi was disconnected from Miri City by road, depending solely on express boats and flights for its transportation needs. The construction of a logging road in 2005 and its subsequent upgrade to a tar-sealed road in 2019 significantly improved accessibility. This qualitative research utilises purposive sampling and employs semi-structured interviews with 20 interviewees to explore*

*the impacts of the road. The findings reveal four primary social and economic impacts. The newly tar-sealed road has greatly enhanced patient transportation to hospitals and made travel more convenient. However, its narrow and hilly characteristics have raised safety concerns. In terms of migration, the primary factor influencing migration decisions continues to be economic opportunities. Economically, the road has altered consumer behaviour, leading to increased shopping in Miri and posing challenges for local businesses. However, it has also spurred new business developments, including national chain stores and local enterprises. The study finds that although the tar-sealed road has improved accessibility, it does not significantly influence the migration decisions of local residents. Instead, job opportunities continue to be the primary factor for migration.*

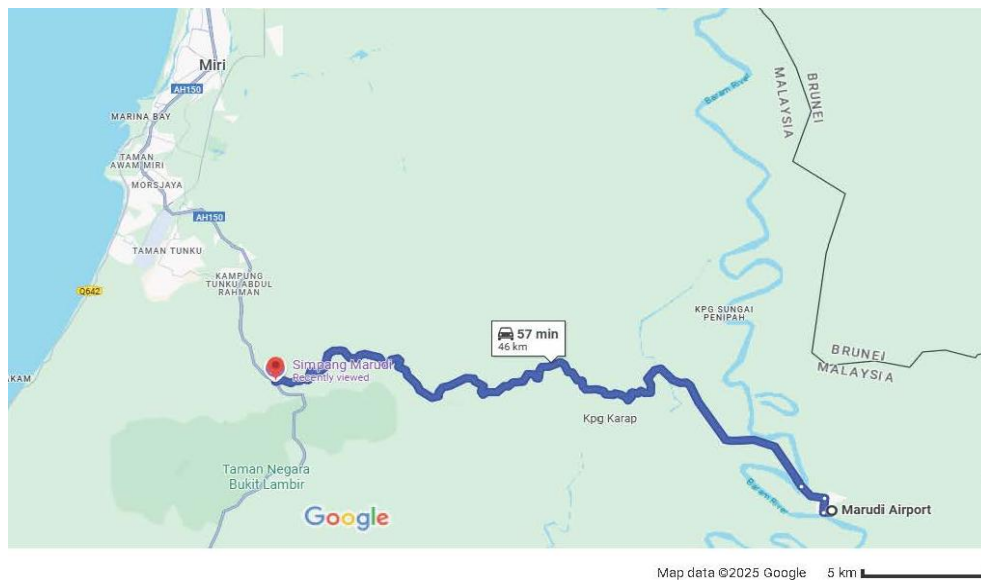
**Keywords:** Rural development, rural roads, migration, socioeconomic impacts

## 1. Introduction

In recent years, there have been many studies which have focused on the issue of rural development. However, only a few of them explored the impact and the role of rural-urban access roads in rural development (Liu et al., 2020; Mulyani et al., 2019). Rural development refers to specific actions undertaken by national or international agencies that are explicitly aimed at increasing production or improving the quality of life in rural areas (ASEAN, 2022; Rhoda, 1983). Nonetheless, rural development must be implemented as a strategic policy to enhance the potential of rural areas. This includes providing residents with sustainable incomes, ensuring access to a diverse array of services, and utilizing rural resources in a way that aligns with the needs of urban dwellers (Abreu & Mesias, 2020; Hodge, 1986). Some suggest that rural development is a strategy to improve the economic and social life of a specific group and extend the benefits of development to the poorest group who are seeking a livelihood in rural areas (Chigbu, 2019; Gayen, 2018). Similarly, Gilaninia (2015) believes that rural development not only conforms to and coordinates with the needs of people but also brings long-term and continuous improvement in rural areas.

One effective strategy for rural development is to provide access roads, encouraging local residents to stay and work in rural areas (Asher & Novosad, 2020; Idei & Kato, 2018; Windle & Cramb, 1997). Before 2005, there was no road connecting Marudi to the nearby city, Miri (Wong, 2012b). The Marudi people face challenges because they can only travel between Marudi and Miri City by express boat or flight, even though the distance is only 44 km. This has a big impact on their socioeconomic well-being. Since 2005, a logging road has connected Marudi to Miri City. The road was constructed by a logging company to transport timber (Wong, 2012a). Since then, the local people have urged the government to upgrade or build a good rural-urban access road. However, in 2007, the Sarawak Government's response was revealed by newspapers that it had no active plan to build any access roads from Marudi to the nearest city for the purpose of halting rural-urban migration (Wong, 2012a). The turning point happened in 2011 when the former

prime minister of Malaysia visited Marudi Town and announced that RM60 millions of rural development funds would be allocated to upgrade the existing logging road to a tar-sealed road (Ongie, 2011). Between 2012 and 2016, the upgrading work faced several challenges, such as technical and weather issues, that caused delays and put the work behind schedule. Thus, this project was officially taken over by Cahya Mata Sarawak (CMS) on 15 September 2016, and the project was expected to be completed by 31 March 2019 (CMS, 2019). The road between Marudi and Miri City was finally completed in February 2019, despite delays and challenges faced by the contractor.



**Figure 1.** The Marudi-Miri tar-sealed road

Source: Google Maps

Between 2005 and 2019, only a few research studies have been conducted to examine the impact of the logging road on the Marudi people (Wong, 2012a, 2012b). Wong (2012a) found that the logging access road did not play a significant role in stimulating outward migration from Marudi. Outward migration had already occurred before any access road connected Marudi to the outside world. The study confirmed that migration was primarily caused by a lack of employment opportunities, not the availability of access roads. Wong (2012b) concluded that the accessibility of the logging road drastically changed how local people commute between Marudi and Miri. Before 2005, 72 per cent of respondents preferred express boats, but after the logging road opened, 73 per cent chose cars as their primary mode of transport. This shift was attributed to the convenience and flexibility of land transportation, allowing users to set their own schedules within ferry operating hours.

Since the logging road was improved, there has been a crucial gap in research from 2019 to 2024, focusing on the social and economic impacts of the tar-sealed road, leaving a comparison with the logging road on the Marudi people unexamined. This study intends to evaluate the impact of the tar-sealed road on the socioeconomic welfare of the Marudi people, as well as the role this accessibility plays in shaping patterns of rural-urban migration.

## **2. Literature Review**

Rural development comprises many components, and each of them is interrelated with the others. Key components often explored in the realm of rural development include the challenges of rural poverty, the phenomenon of rural-urban migration, and the development of rural roads. Inequality in economic growth, particularly regarding the distribution of wealth, has contributed to the incidence of poverty (Hidayah et al., 2022; Hill, 1985), with most of these challenges occur in rural areas (Đurić et al., 2023; Wee, 1999). Thus, each country must adopt the right approach or a combination of approaches to alleviate poverty, particularly in rural areas. There are many studies which discuss methods for alleviating poverty, either in theory or practice. Different types of government expenditures and infrastructures have different types of effects on reducing rural poverty (Besant-Jones et al., 1994; Fan et al., 2000; Rajter & Kim, 2020). Some have claimed that work participation in non-farm activities can reduce rural poverty (Kuznetsova et al., 2021; Sen et al., 2021; Stokke et al., 1991), while others suggested that investment in rural roads and agriculture has the same effect as well. According to Fan et al. (2000) and Simie (2020), investment in rural roads and agriculture has not only generated the largest impact in reducing rural poverty but has also generated higher productivity growth.

Another popular component which is frequently discussed by researchers in rural development is migration. There are many factors which influence people to migrate, particularly rural-urban migration. These factors include rural poverty, lack of employment opportunities in rural areas and better infrastructure in urban areas (Dao, 2004; Peker, 2004; Tamirat et al., 2024). As suggested by Dao (2004) and Eshetu et al. (2023), there is a direct link between rural poverty and rural-urban migration. Once rural poverty is reduced, the process of rural-urban migration will consequently decelerate due to the availability of employment opportunities in rural areas. With similar findings, Peker (2004) claimed that rural-urban migration was not only influenced by unemployment but the absence of basic infrastructure in rural areas. If the population decreased in rural areas, less government investment in terms of infrastructure would be provided. On the other hand, the provision of infrastructure would be increased in urban areas due to an increase in the population, and it would act as an incentive for rural people to migrate to urban areas.

Road is an important element in rural development (Hao et al., 2024; Naim et al., 2024). It can enable rural people to gain better access to livelihood, increase consumption expenditure, and promote transformation in rural areas (Hao et al., 2024; Wilson, 2004). On the other hand, isolation may have a negative impact on rural areas and cause poverty in the region (Mustafa, 2002). Mashiri and Mahapa (2002) assert that the provision of minimum infrastructure is a precondition for implementing poverty reduction programs, particularly in rural areas. In addition, infrastructure such as roads will help in reducing the level of rural-urban migration (Bell, 2022), enabling people access to goods and services (Son & Lee, 2013) and reversing outward migration (Mustafa, 2002; Tamirat et al., 2024).

Two models are emerging in today's literature regarding the impact of access roads on rural development. The first model believes that access roads stimulate outward migration from rural areas, while the second model believes that access roads facilitate rural economic development. Researchers who subscribe to the first model believe that there is a direct link between access roads and rural-urban migration (World Bank, 2021; International Organization for Migration, 2015). Rhoda (1983) and Wilson (2004) claim that one of the factors that stimulates outward migration from rural areas is the availability of access roads to the city.

In contrast to the first model, the second model believes that access roads facilitate rural economic development. Some researchers perceive access roads as one of the critical components in creating a quality and modern lifestyle, as these roads will enable people to travel from one place to another for the purposes of working, schooling and social activities (Aggarwal, 2018; Demir, 2007). Other than perceiving access roads as an important element for rural people in achieving equality in national welfare distribution, some research also shows that it can reduce the activity of rural-urban migration due to the increase in employment opportunities in rural areas (Bansal & Naresh, 2020). There are various impacts that rural road development may have, such as social and economic impacts. Windle and Cramb (1999) studied the social impacts of three selected rural roads in Sarawak and found that these social impacts vary according to the distances between the location of houses and roads. For example, those who live near roads enjoy a greater extent of mobility than those who live further from the roads. Therefore, the social impact of rural roads can be different across places and sometimes different within the same region. Although these researchers possess different views on access roads, all of them agree that access roads will create positive impacts and facilitate rural economic development.

To sum up, not much research has been done on the effects of rural roads and the connection between access roads and rural development, especially with regard to Sarawak, Malaysia. Therefore, research on the topic of rural development and access roads is necessary to advance knowledge in the field of rural development studies and to improve understanding of the problem.

## ***2.1 Neoclassical Economic Theory***

Neoclassical Economic Theory is seen as a relevant framework for understanding the motivations behind migration, particularly rural-urban migration. The relevance of this theory to the research problem and objectives stems from the study's aim to assess how the accessibility provided by the tar-sealed road influenced rural-urban migration patterns. The theory specifically addresses migration decisions based on economic factors.

At the macro level, migrants move from low-wage to high-wage, labour-surplus regions to labour-scarce regions. At this level, Neoclassical economics focuses on differentials in wages and employment conditions between countries. This theory assumes that migration occurs due to the geographic differences in wages and the supply and demand of labour between the sending and destination areas (Massey et al., 1993).

At the micro-level, Neoclassical Migration Theory views migrants as individual, rational actors who decide to move based on a cost-benefit calculation (Haas, 2008). It also assumes that potential migrants have complete information about the employment opportunities and wages in the destination area (Castles & Miller, 2009). Thus, the decision to migrate is made by potential migrants seeking to maximise their utility, in full recognition of both benefits and costs (Teitelbaum, 2008). Thus, a migrant decides to make a move if the return is greater than the migration cost (Chiswick, 2000).

### **3. Research Area**

Marudi, encompassing a total area of 3,079 square kilometres, experienced a substantial demographic shift between 2010 and 2020. The total population significantly decreased from 62,883 in 2010 to 18,838 in 2020, resulting in a population density of 6 people per square kilometre. Among Malaysian citizens in Marudi in 2020, the ethnic composition was predominantly Bumiputera, accounting for 14,286 people (86.7%). This was followed by the Chinese population, numbering 2,001 people (12.1%), while Indians constituted a small minority with only 13 people (0.1%), and other ethnic groups made up 1.1 per cent (177 people) (Department of Statistics Malaysia, 2022).

The incidence of poverty in Marudi remained relatively stable between 2016 and 2019. In 2016, the poverty rate was 16.8 per cent, which marginally increased to 16.9 per cent in 2019. The household income for Marudi, sourced from the Department of Statistics Malaysia (2022), showed slight fluctuations. The median monthly household gross income was RM3,389 in 2016, slightly decreasing to RM3,382 in 2019. On the other hand, the mean monthly household gross income, however, saw an increase from RM4,179 in 2016 to RM4,605 in 2019 (Department of Statistics Malaysia, 2022). Economically, the services sector was identified as the dominant activity in Marudi based on the number of establishments in 2020, with 342 establishments. Other economic sectors included construction with 23 establishments, manufacturing with 11 establishments, and agriculture with 3 establishments.

Public safety statistics indicate a concerning trend in road accident cases in Marudi. The number of road accident cases rose consistently from 40 in 2018 to 63 in 2019, and further escalated to 116 in 2020. These accidents led to a growing number of individuals affected by injuries and deaths. In 2018, 15 individuals were affected, comprising 10 injuries and 5 deaths. This increased to 26 individuals affected in 2019, with 18 injuries and 8 deaths. By 2020, the highest number of affected individuals was recorded at 37, including 29 injuries and 8 fatalities (Department of Statistics Malaysia, 2022).

### **4. Research Methodology**

This study employs a qualitative research approach to explore the socioeconomic impacts of the Marudi-Miri tar-sealed road on the Marudi people. Qualitative research is chosen for its ability to provide an in-depth understanding of complex social phenomena and capture the perspectives and experiences of individuals affected by road development.

#### 4.1 Data collection and sampling methods

Semi-structured interviews are utilised as the primary data collection method. This method allows for flexibility in questioning while ensuring that key topics are covered. The semi-structured format facilitates a comprehensive exploration of participants' views, experiences, and perceptions regarding the socioeconomic changes brought about by the road.

Purposive sampling is utilised to identify interviewees who are expected to offer the most relevant and varied perspectives essential for addressing the research questions. This non-probability sampling technique ensures that participants are chosen based on specific criteria relevant to the study, such as their residence in Marudi and their direct or indirect experience with the road.

A total of 20 interviewees (Table 1) were selected for this study. This sample size is deemed sufficient to achieve data saturation, where no new themes or insights emerge from additional interviews. The selected participants include a mix of local business owners, residents, and other road users who can provide varied perspectives on the socioeconomic impacts of the road. These diverse viewpoints enrich the analysis, allowing for a comprehensive understanding of how the road affects the community.

**Table 1.**

*Interviewees' profiles*

Interviewees	Gender	Age	Attribute
1	Male	51	Resident
2	Female	49	Resident
3	Male	62	Resident
4	Female	44	Resident
5	Male	59	Resident
6	Female	60	Resident
7	Male	56	Resident
8	Female	33	Resident
9	Female	58	Resident
10	Female	59	Resident
11	Female	65	Resident
12	Male	54	Resident
13	Female	54	Shop owner
14	Female	64	Shop owner
15	Male	60	Shop owner
16	Female	35	Shop keeper
17	Female	33	Shop keeper
18	Female	29	Shop keeper
19	Female	39	Shop keeper
20	Male	33	Shop keeper

Source: Interviews

The six-phase thematic analysis framework by Braun and Clarke (2006) is referred to. It starts with familiarising oneself with the data, followed by generating initial codes, then searching for themes, reviewing the themes, defining themes, and lastly, the write-up. Through the process, the authors were able to capture interesting feedback, search for themes and group them according to the research questions. The main themes were the socioeconomic impacts of the tar-sealed road. The social impacts include the issues of health, mobility, road safety, and migration trends. The economic impacts are consumer behaviour, new and existing businesses, and employment opportunities.

## 5. Findings and Discussion

### 5.1 Social impacts

Four social impacts have been identified through interviews. The first social impact is on health. All interviewees noted that while the tar-sealed road did not influence how often they visited public and private hospitals in Miri, it has significantly streamlined the process of transporting patients to those hospitals. Interviewee 3 emphasised that patients with critical conditions requiring urgent care were once airlifted to Miri due to the poor conditions of the logging roads. Now, with the tar-sealed road, patients can be sent to Miri via land transportation by either car or ambulance. This change has reduced travel times and eased the strain on patients and their families during medical emergencies. Moreover, the tar-sealed road not only enhances healthcare access but also fosters a greater sense of community resilience. With quicker access to medical facilities, families are more likely to seek preventative care, leading to better overall health outcomes and reduced long-term healthcare costs for the community (Ma et al., 2023). This shift is particularly significant in rural areas where traditional barriers have historically hindered timely medical intervention.

The second social impact of the tar-sealed road is its ability to enhance mobility. All interviewees highlighted how the tar-sealed road facilitated movement between Miri and Marudi compared to the previous logging road. This makes it easier for them to go to Miri for important matters. This includes the type of car that they use is no longer limited to only four-wheel drive, and the duration of time needed to pass through the road also reduces significantly. As mentioned by Interviewee 7, 'it was very challenging to use their vehicles to drive on the previous logging road, especially those who do not own a four-wheel drive'. With the existing tar-sealed road, smaller vehicles can easily navigate the route. All interviewees noted that before the construction of the tar-sealed road, individuals relied on the express boat as their mode of transportation to Kuala Baram. From there, they had to switch to road transport to reach Miri City. However, the express boat service was discontinued in March 2021 due to the decreasing number of passengers, from 66,174 in 2013 to 3,171 in 2018, and eventually no passengers in 2021 (Raphael, 2022). Although the tar-sealed road is in better condition than the logging road, some interviewees have noted that it still presents certain issues concerning safety. One



significant concern is that the road is both narrow and hilly, posing serious risks to those who use it. For example, when encountering heavy vehicles approaching from the opposite direction, drivers must stop to enable those vehicles to pass safely. Almost all interviewees agreed that a portion of drivers exceed the speed limit, contributing to a rise in road accident incidents compared to the previous logging road. Several interviewees noted that the characteristics of accidents have changed between the former logging road and the current tar-sealed road. On logging roads, incidents often arise from a single vehicle becoming ensnared in the mud. In contrast, accidents on tar-sealed roads typically involve two drivers, particularly when they approach from opposite directions. This shift in accident dynamics underscores the need for targeted safety measures that address the unique challenges presented by tar-sealed roads, including enhanced signage and speed enforcement to mitigate the risks of road accidents.

### ***5.2 The tar-sealed road and outward migration***

The tar-sealed road does not affect the local people's decision to migrate from Marudi. Interviewees argue that local people migrated before the logging road was made available to them. Instead, they highlighted that economic opportunities are the primary factors influencing their migration decisions. These economic opportunities encompass improved job prospects, elevated incomes, and better living conditions in urban areas, which align with what has been suggested by the Neoclassical Economic Theory. Thus, with or without roads, their family members are still migrating out of Marudi. Interviewee 11, who has three children, agreed that her children migrated out of Marudi in search of career advancement and higher salaries. As mentioned by the Interviewee, 'one my daughters is working in Singapore. She can't get that level of income in Marudi'. Interviewee 12 is also having the same situation as his son is working in Bintulu with better career prospects than working in Marudi. He highlighted that there are limited job opportunities in Marudi, especially jobs that require university degrees. However, Interviewee 15, who has a son working in Marudi, has a different view on roads and migration. This interviewee says that no matter whether there is a road or not, his son is staying in Marudi to help him take care of the shop.

This trend indicates that solely enhancing infrastructure is not enough to influence the decision-making of migration. It underscores the necessity for focused economic development initiatives that provide employment opportunities capable of matching the income found in urban areas. Nonetheless, the majority of interviewees concurred that the newly improved road has significantly enhanced the frequency of visits by migrants to their parents and family members in Marudi. Increased accessibility has strengthened family bonds and community ties, helping migrants stay connected to their roots while pursuing new opportunities.

### ***5.3 Economic impacts***

Since the logging road has been upgraded to a tar-sealed road, an increasing number of residents from Marudi are choosing to shop in Miri rather than in Marudi town. From the consumer's perspective, the ease of traveling to Miri for shopping has significantly expanded access to a diverse array of products and services, frequently at more competitive prices. As remarked by Interviewee 8, the variety of products and cheaper prices are the main reasons for her to shop for clothes in Miri instead of Marudi. This poses a considerable challenge for local businesses in Marudi, making it tough for them to compete. Several shop owners (Interviewee 13, 14 & 15) in Marudi town agreed that the number of customers has noticeably declined since accessibility to Miri became easier with the tar-sealed road. The shift in consumer behaviour has led to a significant impact on local businesses, prompting shop owners to reconsider their strategies to the changing market dynamics in order to retain customers and increase their competitiveness.

At the same time, the tar-sealed road also creates new businesses in Marudi town. For instance, a national home improvement retailer, Mr.D.I.Y. opened its 624<sup>th</sup> store in Marudi town in 2024. This expansion provides residents with greater access to quality home improvement products and creates job opportunities in that area. However, the influx of new businesses also intensifies competition, compelling existing local retailers to enhance their services to retain customers. As competition escalates, local retailers may find themselves at a crossroads where adaptation becomes essential for survival (Saidani et al., 2012). In addition to the national chain store, local entrepreneurs have seized the opportunity to launch new businesses in Marudi, driven by the surge of visitors accessing the area via the new road. For example, two new petrol stations with convenience stores have opened. A new convenience store called M Mart has been opened near the entrance of the tar-sealed road. In addition, new restaurants and bubble tea shops have also opened up since the road brings more people into Marudi.

For existing businesses, such as transport drivers (four-wheel-drive), demand remains high. While residents can conveniently drive to Miri City in their vehicles, those without private transportation still require four-wheel-drive drivers to reach their destination. Moreover, these drivers are responsible for transporting sizable goods from Miri to Marudi. The fee has increased from RM 35 per person to RM 50. According to one of the drivers (Interviewee 1), there are demands at night for those who have to return to Marudi from Miri Airport. The fee is usually higher than normal hours, which can be increased to RM 70 per person. The increase in transportation costs highlights the surging demand for dependable services, particularly during busy travel periods and for the transport of larger items that necessitate specialised vehicles.

In terms of employment, there are no significant changes in job opportunities in Marudi town even with the newly opened businesses. With the tar-sealed road, the people of Marudi now have greater access to Miri, the nearest city, making it significantly easier for them to seek job opportunities and work there. Some family members of the interviewees (Interviewee 6, 9, & 10) even return to Marudi every week due to easy accessibility. As emphasised by the Interviewees, the improved road has fostered a

stronger sense of community as families can maintain closer ties despite working in different locations. To complement infrastructure development in Marudi, specifically roads, this study suggests that relevant agencies could develop targeted economic initiatives to create high-value employment. Policies should focus on attracting or fostering industries that offer positions requiring university degrees and providing competitive salaries to retain local talent. In addition, policies could include support programs for existing local businesses to enhance their competitiveness, such as business training, access to capital, and strategies to differentiate their offerings or adapt to changing market dynamics.

## 6. Conclusions

The study on the socioeconomic impacts of the tar-sealed road connecting Marudi to Miri City in Sarawak, Malaysia, reveals significant insights into how infrastructure development can influence rural communities. The study highlights that while the tar-sealed road has markedly improved accessibility, particularly in terms of healthcare and mobility, it does not significantly influence migration decisions. Instead, economic opportunities remain the primary factor for migration. The findings aligned with Neoclassical Migration Theory, which suggests that migrants move from low-wage to high-wage regions.

In summary, while the tar-sealed road has brought about several positive socioeconomic changes, it alone is insufficient to influence migration decisions. Comprehensive rural development initiatives that go beyond infrastructure improvements are essential to address economic opportunities and enhance the overall quality of life for rural residents. Thus, focused economic development initiatives that provide employment opportunities capable of matching the income found in urban areas are essential in Marudi. This suggests that simply attracting new businesses, such as national chain stores or convenience shops, is insufficient if these do not create jobs that meet the income and career aspirations of educated youth. Policies should focus on attracting or fostering industries that offer positions requiring university degrees and providing competitive salaries to retain local talent.

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**Author Contribution Statement:** Bemen Win Keong Wong: Conceptualisation, Methodology, and Analysis. Keelbisan Mika Mus: Investigation, and Data Collection. Regina Garai: Resources, Data Curation, and Editing.

**Conflicts of Interest:** The authors declare no conflict of interest.

**Data Availability Statement:** The authors confirm that the data supporting the findings of this study are available within the article.

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