

# Logging Road, Transportation and Outward Migration in Sarawak: The Local Perspective of Marudi Town

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## Introduction

Marudi Town, the major town of Marudi District, was called an isolated town by the local folks as there was no road connecting it to the nearest city, Miri. Since 2005, a logging road was made accessible to the local to commute between Marudi Town and Miri City. The State Government once believed that roads stimulate outward migration. That was why; there is no active plan to build a road between Marudi Town and Miri City for the purpose of halting outward migration (Roads in Marudi, 2007). This paper examines what really perceive by the local people in Marudi Town on the logging road, the impact of the road on transportation, views on outward migration and the future migration plan of the local people.

## Outward Migration and Rural Roads

In the past few decades, many studies have placed their attention in the urban issues such as urbanization, transportation, poverty, and migration mainly due to the human movement from rural to urban areas (Hamirdin, Siti, & Nordin, 2012; Keeling, 2009; Marquette, 2007). Nonetheless, rural issues are also receiving equal attention in examining the impacts of outward migration, rural poverty, accessibility and transportation (Kay, 2006; Walle, 2002; Wong, 2012).

The burning rural issue which is frequently discussed by researchers is outward migration. The common factors of migration are rural poverty, lack of employment opportunity in rural areas and better infrastructure in urban areas (Dao 2004; Perker 2004). As suggested by Dao (2004), there is a direct link between rural poverty and outward migration. The study reported that 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, Perker (2004) claimed that outward migration was not only influenced by unemployment but the absence of basic infrastructure in rural areas. If the population decreases in rural areas, less government investment in terms of infrastructure would be provided. In contrast, the provision of infrastructure would be increased in urban areas due to an increase of the population and consequently, becomes a pulling factor for rural people to migrate to urban areas.

In general, the factors which stimulate outward migration can be categorized into pull and push factors. These factors are often interchangeable when examined from either sending or receiving areas. For example, Pham (2001) and Faggian (2009) point out that one of the factors which cause outward migration in developing countries is the utilities and amenities differences between rural and urban areas. This factor can either be considered as a pull or push factor, depending on which side the issues is examined. However, Weeks (1994) explains a different view on the push and pull factors in a different way. He argues that the push factor is involuntary while the pull factor is voluntary. For example, people were forced to migrate to urban areas by an insecure living environment, compared to those who choose to migrate because they are attracted by a modern lifestyle and better job opportunities in urban areas.

There are many different views in regard to outward migration. According to Marquette (2007), most of the policy makers in developing countries perceive outward migration as a negative event and survival strategy for rural people. That is why all kinds of policies and development programs have been suggested to stop outward migration and keep people in rural areas. According to Roads in Marudi (2007) and Wong (2008), some policy makers even purposely do not provide any rural access roads between rural and urban areas in order to halt outward migration.

In the issue of rural roads, the decision on whether to build one always comes first in the discussion. Wilson (2004) explains that the main purpose for authorities to build rural roads, under economic and political circumstances, is to govern. He perceives the provision of rural roads as an asset in earning political support from the local people. However, Escobal (2005) has an opposite view on the matter and argues that ruling governments perceive rural road investments or rehabilitation as less efficient in attracting votes in the national election. In brief, rural roads have a significant role in certain political agendas when the road itself has an impact in gaining support from the local people. Otherwise it is just an ordinary government investment in terms of rural infrastructure.

Other than the political perspectives, sealing a road or a decision not to build a rural road could have critical impacts in rural areas. The negative impacts include the slow pace of rural economic growth, low income levels and the stimulation of outward migration (Cheers, 2002). When there is no investment from investors in rural areas due to insufficient infrastructure, it will increase unemployment and decrease the income level of rural people and eventually force them to find jobs in urban areas which cause outward migration.

There is one interesting study which focuses on the social and economic impact of rural roads on local communities, particularly in Sarawak (Windle & Cramb, 1997; 1999). In the findings, they argued that rural access roads have increased the mobility of local residents, the range of leisure activities, amount of social contacts, the quality of government services, chances to be educated in school, and chances of saving life especially in remote areas. However, the benefits were not well distributed especially between men and women, and among regions that have different accessibilities. Moreover, roads which access urban areas have more benefit to local communities in terms of better choices of goods and services, compared to roads which access small towns.

### The Logging Road between Marudi Town and Miri City

In 2002, the Sarawak state government received funding from the federal government for rural development projects in Sarawak. With the available funding, a 14 km unpaved rural connecting road (Part A in Figure 1), which cost RM 1 million was constructed from Marudi Town to connect with the logging access road (Part B in Figure 1) between 2002 and 2005.

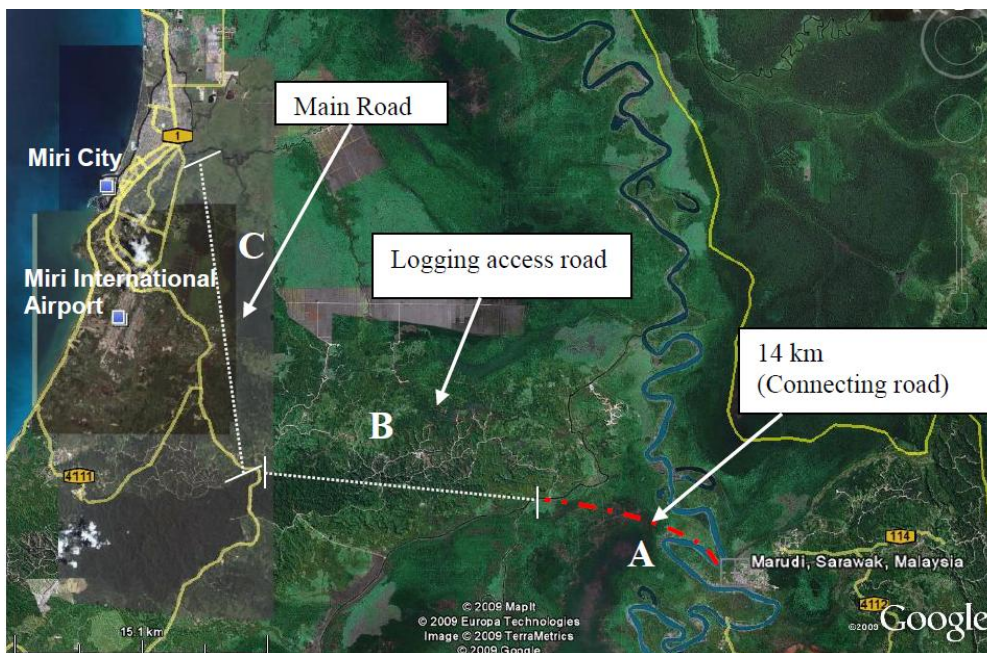


Figure 1: The road from Marudi Town to Miri City

The connecting road is cut by two rivers. Thus, road users need to cross the rivers by ferry. The end of the logging road is connected to a tar-sealed road (Part C in Figure 1) which allows road users to reach the City. The overall distance from Marudi Town to Miri City using land transportation is about 55 km (from Part A, Part B and Part C to Miri City).

The main purpose of constructing an unpaved connecting road (Part A in Figure 1) to connect with the logging road is to create an alternative way for the local people to travel between Marudi Town and Miri City. In fact, there were two other options for the local people to travel between these two places before 2005, which was either by plane or express boats. One of the disadvantages of these two modes of transportation is the limited operating hours. The last flight departing from Marudi

Town to Miri City is 5.00 pm and the last return flight from Miri City is at 4.05 pm. Similarly, the last departure time for the express boat either from Marudi Town to Miri City or return is 3 pm.

## Research Methodology

To examine the impact of the logging road between Marudi Town and Miri City, a case study has been undertaken by using several data collection methods namely questionnaire survey, in-depth interview, observation and secondary data analysis. Two different sampling methods were employed in selecting the respondents for questionnaire survey and in-depth interview. In the questionnaire survey, systematic sampling method has been applied to obtain the sample of 362 respondents. On the other hand, purposive sampling method was employed in the in-depth interview to identify the interviewees who are able to represent the population namely the president of local associations, representative of political parties and shop owners.

## The Findings

### The Impact on Transportation

Since the logging road was accessible by the local people, the choices of transport modes to commute between Marudi Town and Miri City have changed drastically. As shown in Table 1, before the logging road was accessible, 72 percent (n=260) of the respondents selected the express boat as their most preferred transport mode to travel between Marudi Town and Miri City. After the logging road opened, only 16 percent (n=56) of the respondents still chose the express boat as their first choice and the majority, 73 percent (n=264) of the respondents chose cars as their most preferred transport mode to travel. However, the number of respondents who chose the express boats as their second choice increased from 28 percent (n=102) to 64 percent (n=231).

Transportation	Choices of the respondents before the logging road opened			Total	Choices of the respondents after the logging road opened				Total
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	
Cars	N/A	N/A	N/A		264	62	35	1	362
Express boat	260	102	N/A	362	56	231	72	3	362
Plane	100	257	5	362	41	68	247	6	362
Others	1	2	359	362	N/A	1	8	353	362

**Table 1: The preferred modes of transportation of the respondents before and after the logging access road opened**

In overall, the land transportation, particularly cars, have become the most preferred transport mode of the local community based on two factors. The first factor is convenience and flexibility. In general, there are two groups of road users. The first group drove their own vehicles (cars or motorcycles). In this situation, road users were able to decide their own travelling schedule as long as it was within the operation hours of the ferries (6.30 am to 8 pm). The second group of road users travelled using the transport services provided by the private transport providers. As shown in Table 2, the entire journey by land takes approximately one and a half hours to reach Miri City from Marudi Town. Compared to travel by river, the travelling time is shorter by one hour; an express boat needs about two and a half hours to reach Miri Ferry Terminal. Travelers are required to hop on a taxi for another 30 minutes to reach Miri City from the ferry terminal. In total, travelers need to spend about 3

hours to reach Miri City from Marudi Town by using the express boat. Due to the long journey and unsuitable operating conditions after dark (the last express boat departs Miri Ferry Terminal at 3 pm), passengers find it difficult to travel between Marudi Town and Miri City, as the expense of staying overnight at the Hotel in Miri City a burden to those who cannot afford it.

Transports	Cost	Time	Remarks
Four-wheel drive	RM35	One and a half hours	Straight to desired destinations
Express boat	RM20 + RM30 (Taxi to the city) = RM50	Two and a half hours + 30 minutes (taxi)	Service stop after 3pm
Flight	RM54 to RM76 + RM18 (Taxi to the city) = RM72 to RM94	20 minutes + 10 minutes (taxi)	Service stop after 4.05pm (at Miri) and 5pm (at Marudi)

**Table 2: Comparison of transport modes**

The second factor for cars becoming the most preferred transport mode was the cheaper travel fares when compared to flight services. As shown in Table 2, one-way flight tickets cost between RM54 and RM76. In order to reach Miri City from Miri International Airport, passengers need to spend another RM18 for a taxi. Thus, the total fare from Marudi Town to Miri City is ranges between RM72 to RM94. Whereas, the total fare using land transportation is only RM35 which will send passengers from Marudi Town to their desired destination in Miri City.

However, some respondents and interviewees raised their concerns about the safety of driving on the logging road, particularly during the wet season. As the logging road is not paved, driving requires skills and concentration because vehicles easily drift and are hard to control on the steep parts of the road.

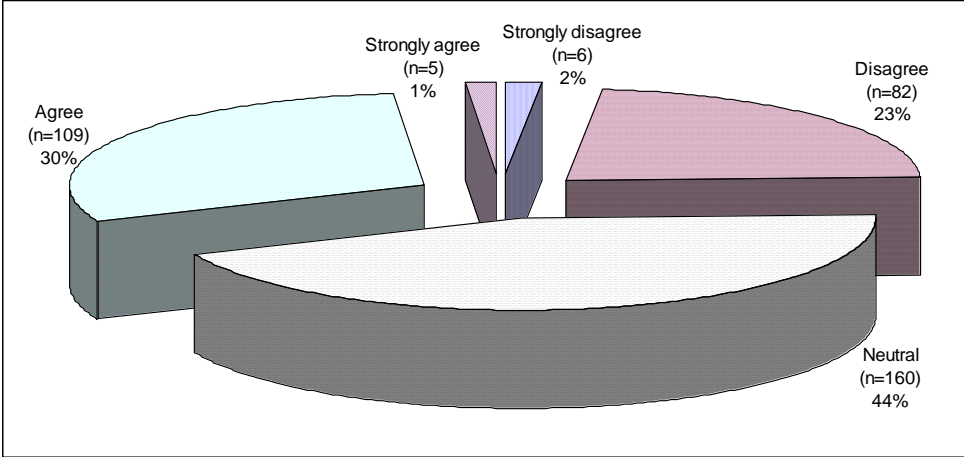
### **The Views of the Local on Whether Roads Stimulate Outward Migration**

The majority of respondents in the study had a positive reaction when they anticipated that the logging road could be accessible by them. About 55 percent (n=196) of the respondents were happy and 23 percent (n=83) said that they were extremely happy when the logging road became accessible from Marudi Town to Miri City. On the other hand, only 18 percent (n=63) of the respondents remained neutral. In general, the respondents were happy with the logging road because it was the first access road which connected Marudi Town to the outside world since it was first established. In addition, the logging road improved their mobility, shortened travelling time and reduced travelling costs between Marudi Town and Miri City.

The overall feedback of the respondents from the questionnaire surveys on the statement of access roads stimulating outward migration from rural areas was different from the interviewees from the in depth interviews. As shown in Figure 2, most of the respondents, 44 percent (n=160), preferred to stay neutral when they were asked this question. The proportion of the respondents who agreed and strongly agreed with the statement of access roads stimulated outward migration was 31 percent (n=114), slightly higher than those who disagreed with the statement, 25 percent (n=88).

As described by the respondents, due to uncertainty, the majority of them preferred to stay neutral as there were two possible outcomes from the provision of a tar sealed road between Marudi Town and Miri City. The first possible outcome was outward migration occurring due to a lack of

continuing rural development programs and no increase in employment opportunities in Marudi Town. The second possible outcome was that outward migration would reduce due to the creation of proper rural development programs which would increase employment opportunities in Marudi Town.



**Figure 2: The perspectives of the local people on whether roads stimulate outward migration**

From the in depth interviews, 10 out of 11 did not agree that access roads stimulated outward migration but they believed that reverse migration would occur if there was a good road, such as a tar sealed road, between Marudi Town and Miri City. As explained, with easy accessibility and the provision of affordable land transportation services, Marudi Town would have the potential to be attractive not only to the migrants who moved out of Marudi but to other businesses from Miri City which would eventually create more jobs in the town.

**The Future Migration Plans of the Local**

As shown in Table 3, the distribution of the feedbacks on whether the respondents were planning to leave or stay in Marudi Town are quite consistent except from those who had stayed in Marudi Town for less than ten years.

Of the 77 respondents who had lived in Marudi Town for less than 10 years, 31 percent (n=24) of them intended to move out due to four main reasons, namely they were not born there, better employment opportunities in other places such as Miri City, absence of a good road system to the outside world and lastly, to follow the decision of their spouse or children. On the other hand, 68.8 percent (n=53) of the respondents who did not intend to move out gave five main reasons, namely they had a permanent job in Marudi Town, they owned houses or properties there, a sense of belonging, affordable living costs and a safer living environment compared to Miri City. From the reasons given, it shows that employment opportunities played an important role and influenced the decision making on migration.

Years living in Marudi Town	Are you planning to leave Marudi Town?		
	Yes	No	Total
1 to 10 years	24 (31%)	53	77
11 to 20 years	11 (17%)	54	65
21 to 30 years	16 (21%)	61	77
31 to 40 years	3	58	61
41 years and above	4	78	82
Total	58	304	362

**Table 3: The respondents' migration plans**

The highest percentage of the respondents who intended not to leave Marudi Town belongs to those who have lived there between 31 to 40 years and more than 41 years. For the 31 to 40 years group, of the 61 respondents, 95 percent (n=58) did not wish to leave Marudi Town due to similar reasons given above. Similarly, for the group of more than 41 years, of the 82 respondents, 95 percent (n=78) did not wish to move out from Marudi Town.

### Conclusions

In overall, the findings show that the local has a very positive perception on the logging road. Since the logging road was made accessible by the local people to commute between Marudi Town and Miri City in 2005, it has drastically changed the choice of the local from river to land transportation. Other than that, the perspective of the local regarding roads stimulate outward migration has shown an inconsistent pattern as the majority of the respondents in the questionnaire survey stayed neutral in the question but majority of interviewees in the in-depth interviews do not agree with the statement. In terms of the future migration plans, the local who stayed in Marudi Town for less than 10 years are more likely to migrate compared to those who stayed more than 10 years with the reasons of more employment opportunities in the urban areas and the absence of a good road between Marudi Town to the outside world.

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