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Community Engagements in Road Safety: Experiences from My Safe Road Programme in Malaysia

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ABSTRACT

The Malaysian government has initiated many road safety initiatives to reduce road crashes, such as crash prevention, crash reduction, road maintenance, and construction of sustainable roads. However, none of those initiatives have direct contributions from the community level. This paper aims to study the effectiveness of engaging local communities in realising Malaysia's road safety index. States in Malaysia can face serious issues in road safety performance if road safety indexes and their associated initiatives are solely derived from injury and death data without any participation from the local community. Therefore, the community engagement experiences from My Safe Road Programme were explored to be utilized as a benchmark in realising the national strategic road safety index framework. The findings indicate that while various localities shared certain road safety issues, there were also issues exclusive to specific localities only. Community engagement has been proven to be highly efficient in identifying local road safety issues and risky locations. Therefore, more intense and structured community engagement sessions should be planned to understand the root cause of road safety issues in each state and aid in establishing the Malaysian Road Safety Index.

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1. Introduction

Road crashes are one of the most never-ending issues around the globe and are considered as one of the highest prices in human injury and death. Based on a road safety report by World Health Organization (WHO), road traffic injuries continue to rise steadily each year, from 1.15 million in 2000 to 1.35 million in 2018. Road crashes account for about 2.37% and are the eighth cause of global death out of 56.9 million deaths worldwide (Chang et al., 2020). In Malaysia, it was reported that 24 deaths per 100,000 populations are among the world's highest figures, compared to a regional figure of 17.9 deaths per 100,000 populations. Along with this figure, Malaysia has the third highest fatality rate from road crashes in ASEAN countries, behind Thailand and Vietnam. This situation is alarming since Malaysia is moving towards a dynamic and progressive country with a rapid pace in the economic sector, motorisation, and industrialisation (Zachau, 2015). As the number of vehicles increases, it will lead to higher risk exposure to road crashes with more deaths, injuries, and property damages (Eusofe & Evdorides, 2017).

It is widely known that several factors may contribute to road traffic crashes, such as driver's fault, vehicle failure, roadway condition and environment. According to the Malaysian Institute of Road Safety Research (MIROS), the most critical factors that contribute to road crashes are driver's fault (80.6%), road conditions and environment (13.2%), and vehicle condition (6.2 %) (Idris et al., 2019). The government and private sector have taken various approaches and strategies to resolve road safety issues by successfully played their role by continuously running a vast awareness campaign through various media platforms. Nevertheless, the implementation of the approaches is still insufficient to curb these issues (Eusofe & Evdorides, 2017).

This shows that to provide safe facilities and services, road safety measures must be done collectively and require the involvement of the government, private sectors and local communities. This is supported by extensive study done by (Kowtanapanich et al., 2011), proving that local residences can identify and locate the black spot areas within their neighbourhood. Building local community participation, especially in determining the local driving behaviour and local road safety understanding, are crucial issues to successfully implementing the safe system approach (Smithson, 2009). Hence, the engagement with the communities directly connected with the road safety issues must be established to ensure proactive road safety measures are grounded and comprehensive.

To ensure Malaysia becomes a champion in road safety, the Malaysian government is adopting safe system approaches that target 50% reduction in road death and serious injuries by the end of the next decade (Ishak & Syed Md Rahim, 2020). Hence, stronger and better engagement with the public directly connected with the road safety issues must be established.

Therefore, this paper presents a systematic review on community engagements in realizing the Malaysia road safety index based on experiences from My Safe Road programmed from two districts, i.e., Kuala Rompin, Pahang and Kota Bharu, Kelantan. A detailed workflow until specific road safety indicators for each district were listed out and explained thoroughly. Finally, the contribution from the programme to the development of the first Malaysia Road Index that can be used throughout Malaysia will be justified.

2. Road Fatality Indicators in Malaysia

Many indicators can contribute towards the development of safety performance index. Safety Performance Index (SPI) should ideally reflect the operational conditions of road traffic (Assum & Sørensen, 2010). Taking this opportunity, SPI was then used to evaluate the road safety status and guide progress towards safe systems (Tingvall et al., 2010). However, some indicators can relate to road crashes that occurred in Malaysia are only unique to Malaysia's setting. According to Arowolo, Rohani, and Abdul Rani (2014), few indicators for constructing the road safety index for regional, urban and highway road safety are stated in Table 1.

Table 1: Example of road safety indicators (Arowolo et al., 2014).

Indicators	Definition
Road user behaviour	Driving license less than 3 years, drunken driving, overspeed rate, fatigue driving rate
Vehicle safety risk	Level of motorisation, growth rate of vehicles, percentage of motorcycle
Traffic risk	Accidents per 10,000 vehicles, fatalities per 10,000 vehicle Accident per 100,000 people, fatalities per 100,000 people Accidents per 100 km, fatalities per 100 km, Casualty rate
Road situations	Proportion no lighting at night, proportion of channelised intersections, proportion of signalised intersections, % of undivided roads, number of days of adverse weather
Socio-economic factors	Percentage of floating population, popularisation rate of traffic laws, traffic safety common sense

Meanwhile a study from Mohd Jawi et al. (2009) highlighted some potential indicators to develop road safety indexes in Malaysia, including coordination and management of road safety, road accident data systems, road safety funding, safe planning and design of roads, improvement of hazardous locations, road safety education, driver training and testing, road safety campaign, vehicle safety standards, traffic legislation, traffic police and law enforcement, emergency to road accidents victims, road safety studies, and road accident coasting.

In Malaysia, research activities are mostly carried out by MIROS and center of excellences (CoE) in several universities. MIROS develops its strategy and programmes based on the current direction and policies of the Ministry of Transport (MOT) and the government. Road safety indicators are mainly categorised into few groups, which are (i) crash-related indicators, (ii) road-related indicators, (iii) vehicle-related indicators, and (iv) person-related indicators. These indicators are highlighted according to the factors that commonly caused vehicle crashes in Malaysia. Therefore, a deep study to investigate which indicators should be focused on to form the best road safety index for Malaysia shall be conducted.

3. Community Engagement in Road Safety

One of the major setbacks of the previous campaign and awareness programmes done by the Malaysian community is the campaign's inability to reach the local community's heart since the effectiveness of the campaign is continuously debated and argued (Ghani & Musa, 2011; Shaari et al., 2015). Although almost media channels of all nations were used to disseminate facts and information on road safety and its impact, the community are still somehow does not have any sense of belonging to the road safety campaigns and programmes as the effects of mass media campaign alone without a combination of a good enforcements is very small (Elvik, 2009). Not only that, several efforts in gathering public thoughts and opinions on how to deal with the impact of the crash normally fail to gather large crowds to participate. Several factors might cause this issue, and one of it is probably because they do not feel like their opinion gets any weightage in the whole decision process. Another part is derived from lacking skills, knowledge, and leadership to get involved in some national agenda. This is supported by a study by (Howat et al., 2001), who stated that people are often reluctant to become involved in road safety initiatives because they felt they are lack of leadership and skills to get involved.

However, as the overall road safety initiatives mainly concern saving the lives of road users, several governments start to realise the need to get extensive local involvement in the development of road safety planning in terms of getting feedback, comments, and public thoughts. Several serious engagements in a series of discussions to embed the expectations and needs from the local people who received direct risk from their surrounding roads were planned to compile fresh and local inputs from the local people. These moves were also agreed by Williams (2019) through his report on prioritising the opinions from the public in managing road safety in Western Australia (WA). Williams (2019) recommended that the quality of engagement with the community must be improved to facilitate more overt focus on community needs.

To accentuate the importance of getting the public's opinion on road safety issues, Williams (2019) strongly highlighted that road safety issues might be contentious when evidence regarding effective road safety measures does not reconcile with community expectations or beliefs. Although certain road safety experts may feel that public opinion does not hold any leverage in defining or understanding road safety principles, their experiences with local behaviours towards road safety understandings, patterns of daily driving and movements play a tremendous difference in setting up suitable planning for specific local settings (Vernon, 2014).

Nevertheless, engaging local communities from different walks of life could also create a sense of trust from the local people by recognising their integral role in achieving a safe system for the whole nations safety frameworks (Smithson, 2009) as local professionals from different backgrounds can build a shared understanding of each other's field and help to develop peak rapport.

4. State Level Road Safety Initiatives

Realising that road safety initiatives must be developed from the root cause of the road safety problem at the community level, several High-Income Countries (HICs) had come out with their road safety initiatives at the state's level before it was brought up to the country's level. For example, in the United States, one manual identifies 23 key emphasis areas that affected highway safety in the US had been developed. Each of the 23 key emphasis areas (such as speed, head-on collisions, novice drivers, collisions with utility poles, distraction, aggressive driving, and non signalised intersections, etc.) includes strategies and outlines of the requirements for implementing each strategy (Transportation Research Board, n.d.).

On the other hand, experts in Europe carried out the "Supreme" project and produced a report titled "Best Practices in Road Safety: Handbook for Measures at the Country Level" in 2017. The final

report of the "Supreme" project consists of 14 volumes (European Commision, n.d.). In addition, the European Road Safety Observatory (ERSO) has an interesting knowledge base of "fact sheets".

To help low- and middle-income countries improve their road safety performances, the international community, namely those from high-income countries, vowed in the Brasilia Declaration to help low- and middle-income countries develop strategic road safety. However, as the local road safety experts understand the local circumstances, contributions from local road safety champions such as academics, NGOs, policymakers, and most importantly, government agencies in managing road safety must be fully utilised.

Many indexes are being practised in many countries. However, the effectiveness of these indexes varies due to many factors such as geography, cultures, and many more. As a middle-income developing country, Malaysia is listed as one of the countries with the highest fatalities due to road crashes. Therefore, specific indicators from local perspectives developed by local road safety champions must be gathered and improved. The indicators can be used in all Malaysian local settings to start a standard of Malaysia road safety performance index to improve states' road safety performance.

The restrictions are due to data sources and confidentiality of secondary sources to get the necessary information regarding the details of road crashes in Malaysia. However, we managed to figure out and listed the common factors reported regarding to the road crashes. Four groups of basic safety indicators were considered, which refer to; policy performance (road safety programmes), final road safety outcomes (fatality rates, scope of traffic injury), intermediate outcomes (wearing rates of seatbelts, crashworthiness, and composition of the vehicle fleet, alcohol-impaired driving), and background characteristics of countries (motorisation level, population density) (Gitelman et al., 2010).

5. States in Malaysia

Malaysia has 13 states and 3 Federal Territories separated into East Malaysia and West Malaysia by the South China Sea. States have their legislative power. All states' constitutions must have a standard set of provisions as in the Article 71 and 8th Schedule of the Federal Constitution.

Based on this, each state will have its ways of maintaining and conducting stability, finding allocations and budgets every year. In the matter of road safety, most states have their own Majlis Keselamatan Jalan Raya (MKJR). MKJR is a non-Governmental Organisations (NGO) that oversees crash issues with clear objectives to reduce road crashes and death rates, and instil road safety awareness among road users in Malaysia.

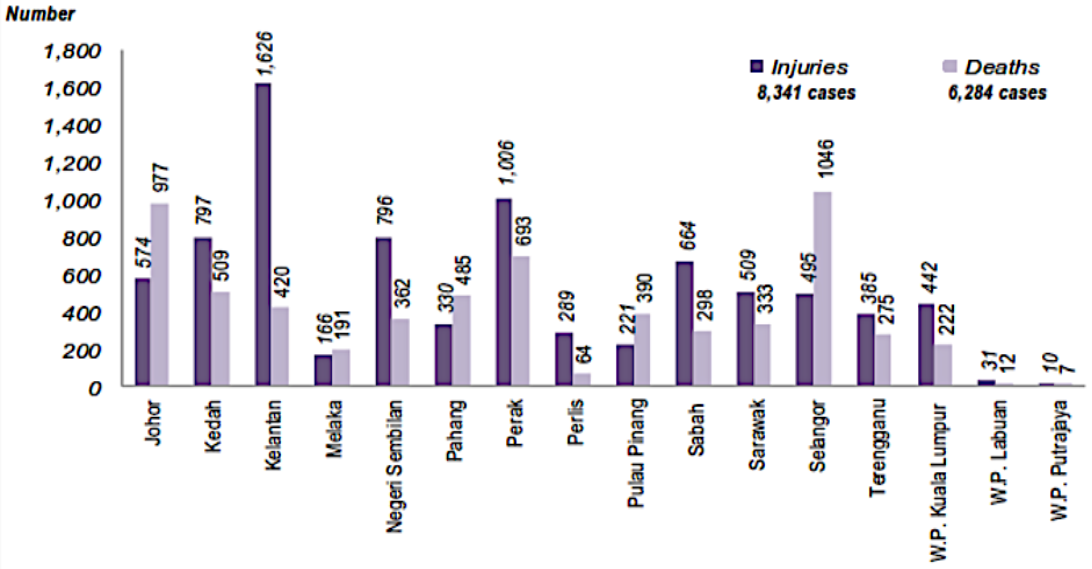

Figure 1: Deaths and injuries in road crashes reported by state in 2018 (*Source:* Royal Malaysia Police, 2018).

Figure 1 shows the road safety statistics in all Malaysian states in 2018. Based on the data of deaths and injuries in 2018, Kelantan recorded the highest number of injuries (1,626 injuries) followed by Perak (1,006 injuries) and Negeri Sembilan (796 injuries), while Selangor recorded the highest number of deaths (1,046 deaths), followed with Johor (977 deaths) and Perak (693 deaths).

By comparing only based on the injuries and death data, those states seem to have serious issues in road safety performance. However, underlying factors that may contribute to these numbers should be carefully explored to overcome the real issues. The background and root of the road safety issues in each state need to be deeply explored to understand the local road safety issues and demographic statistics, as in Figure 2 is very important.

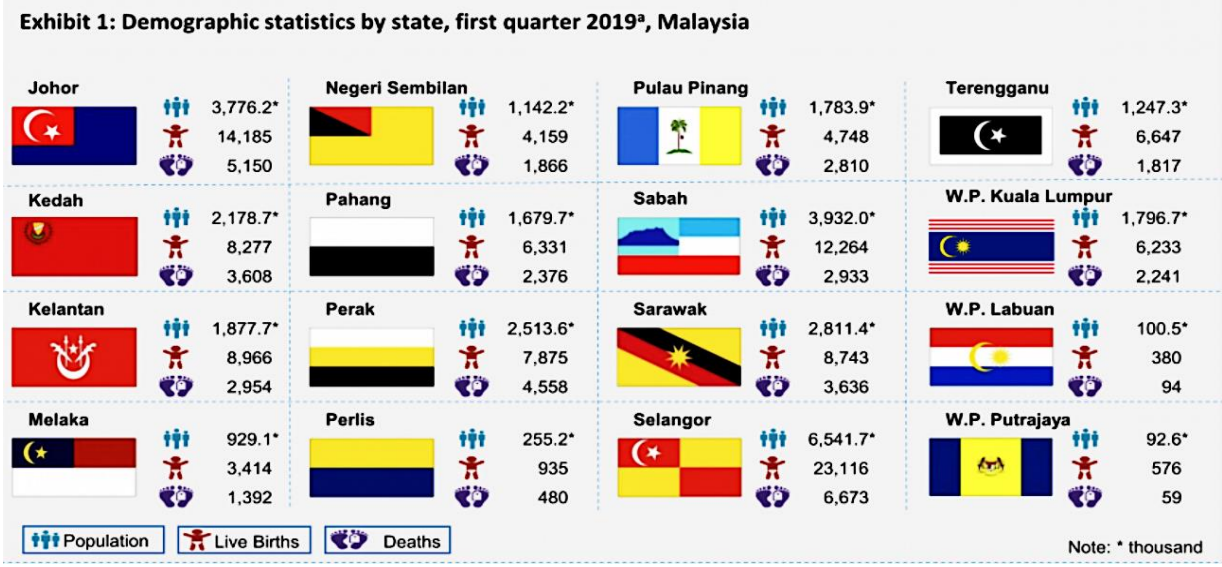

Figure 2: Demographic distribution by states and territories in the first quarter of 2019
(*Source:* Department of Statistics Malaysia, 2019)

Figure 2 shows the first quarter of 2019 data for populations, live births, and deaths in each state in Malaysia. Three states that have highest number of injuries and deaths were extracted and compared in Table 2, assuming that the number of deaths and injuries in road crashes (as presented in column 2 and 3) were unchanged.

Table 2: Comparisons on injuries/deaths and population/live births and deaths.

States	Injuries (road crash)	Deaths (road crash)	Population (thousand)	Live births	Deaths (all)
Kelantan	1626	420	1,877.7	8966	2954
Perak	1006	693	2513.6	7875	4558
Negeri Sembilan	796	362	1142.2	4159	1866
Selangor	495	1046	6541.7	23116	6673
Johor	574	977	3776.2	14185	5150

Based on the above data, Negeri Sembilan and Johor show very worrying conditions, with nearly 19% of the total deaths were caused by road traffic crashes. However, by looking at the populations, Selangor, who had the highest number of population, recorded the highest number of road traffic deaths and total deaths. Deeper investigations on the profiles of the above states gathered from various states reports such as state's budget report were presented in Table 3.

Based on the figures for all items, Selangor is undoubtedly the most progressing state in Malaysia by championing most economic indicators such as average household income, average daily traffic, numbers of higher educational institutions, number of domestic tourists, and numbers of workforce. The value of land used areas versus population growth in Selangor laid the impression that most people in Selangor are concentrated in the same areas. However, comparing the value of economic growth per se, Johor stood out better than Selangor with 2.7% more growth.

A deeper look inside the land used area for these five states is summarised in Figure 3 to 7.

Table 3: Profiles of selected states in Malaysia.

Items	Kelantan	Perak	N.Sembilan	Selangor	Johor
Average household income	RM4,874	RM5,645	RM6,707	RM10,827	RM8,013
Average daily traffic	95,872	244,988	124,239	410,719	382,418
Land use area (hectare)	3,008,866.806	4,250,857.594	1,356,516.903	1,610,957.740	3,850,697.186
Total IPTA/S	14	46	41	124	65
Total domestic tourist (million)	11	21.1	13.3	33.6	14.3
Total manpower (million)	0.68	1.04	0.48	3.4	1.76
Budget (infrastructure)(million)	309.51 (development)	290.4	20.87	347.7	325.7
Areas can be developed (hectare)	37,255.683	91,896.21	8,989.142	43,163.044	49,702.055
Population growth (%)	1.2	0.2	0.3	1.02	0.5
Economic growth (%)	1.8%	4%	3.4%	6.7%	9.4%

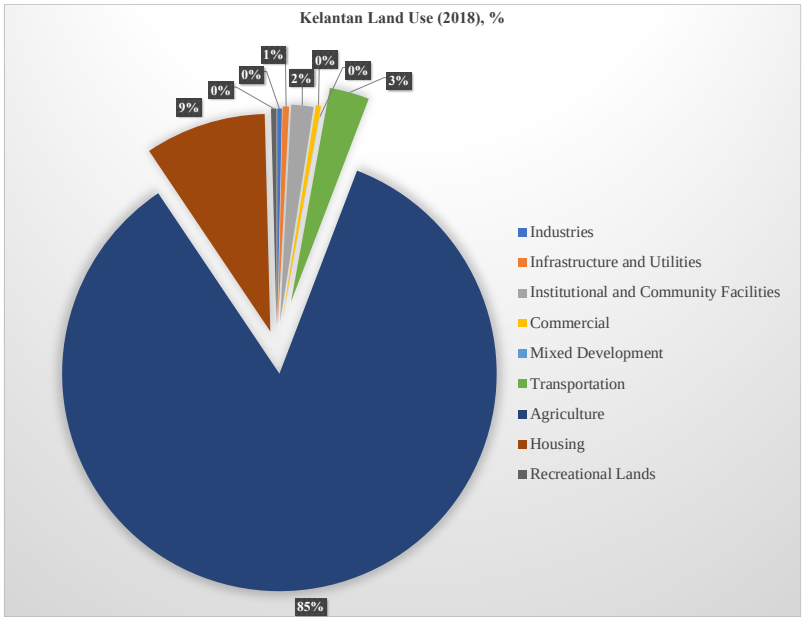

Figure 3: Kelantan land use.

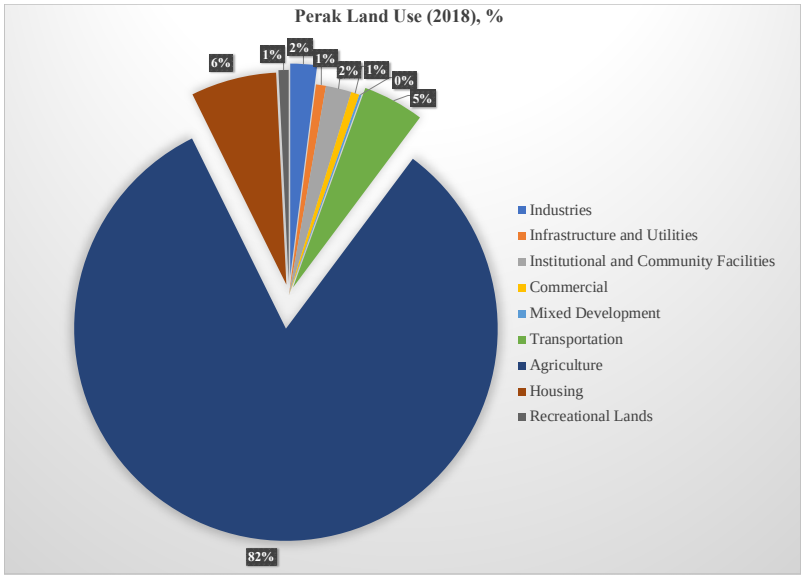

Figure 4: Perak land use.

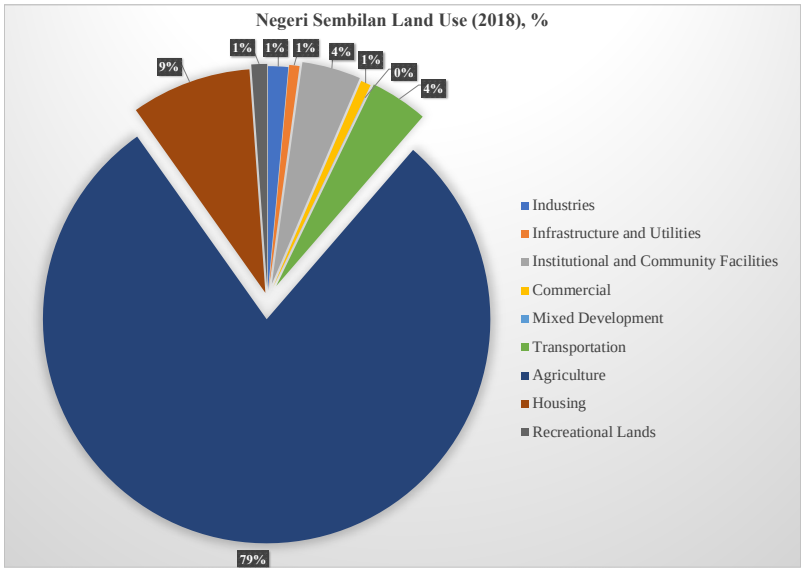

Figure 5: Negeri Sembilan land use.

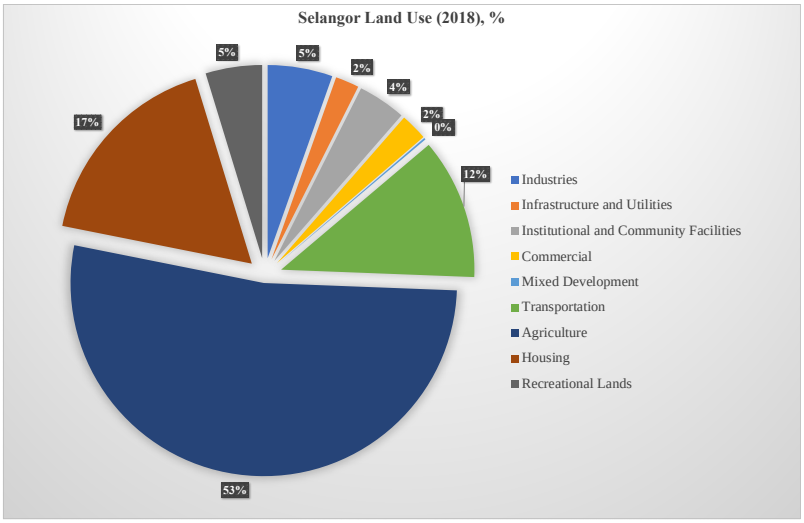

Figure 6: Selangor land use.

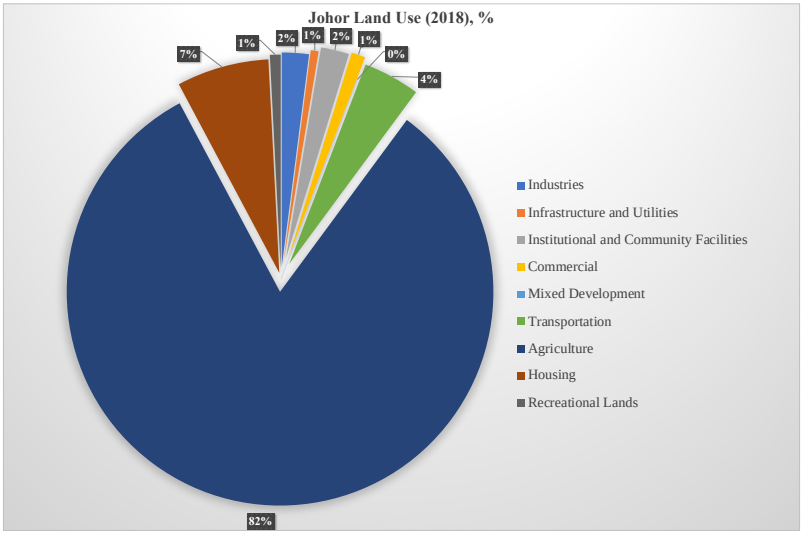

Figure 7: Johor land use.

Based on these figures of land used in 2018 (Figure 3 to 7), majority of the states are highly progressive in the agriculture sector. Selangor recorded the lowest percentage of agricultural land used with only 53% of the total land used compared to the other states who most recorded between 70% to 80% of agricultural land used. However, Selangor has the highest land usage in the sector of industries and commercial.

These data prove that different states set for different lifestyles and economic powers that bring different travel purposes and behaviour; hence, in the road safety context, it would also justify having different sets of initiatives or indexes for different local settings.

6. The Concept of My Safe Road

This program was realized in conjunction with the United Nations Decade of Action for Road Safety approaches, aiming to decrease the road death rate by half of the existing rate in the year 2020. To accomplish the goal, the Malaysian government established an initiative through National Blue Ocean Strategy (NBOS) to develop a comprehensive countermeasure to act and highlight the urgency for action tailored to the local context of road safety issues.

The Ministry of Transport initiated My Safe Road under Jabatan Keselamatan Jalan Raya (JKJR). Initially, the program was planned to be conducted in all states in Malaysia, targeting districts with the highest number of risks (calculated based on the number of deaths over the number of crashes) in each state for several years. However, due to changes in government directive measures, the program was stopped after being realised for several states and is scheduled to be resumed soon.

As of now, the program has been implemented in several states in Malaysia, such as Pulau Pinang, Johor, Kota Bharu and Pahang, involving the local community, professional bodies, and politicians. The responsibility to run the program was taken by Jabatan Keselamatan Jalan Raya (now known as Bahagian Keselamatan Jalan Raya, Jabatan Pengangkutan Jalan) with support from Majlis Keselamatan Jalan Raya for each state.

7. The Framework of My Safe Road

My Safe Road program started by determining the riskiest district in the state based on the number of deaths/number of crashes. After selecting the riskiest district, the secretariat of the program that is normally a team from JKJR will choose a pool of influential individuals in that particular district who were believed could contribute to the program's outcome, which is the Road Safety Strategic Planning for the district. In most conditions, among the selected participants were the district officer, head of government offices such as the Directors of Public Works Department (JKR), Department of Irrigation and Drainage, Department of Education, high-rank officers from local councils, Royal Malaysia Police, district

hospitals, local educational institutions, the local assemblyman, head of villages and other decision-makers. This program was handled by a team of road safety experts that can analyse and forecast road safety data via a 2- or 3-day workshop. At the end of the workshop, the dedicated Road Safety Strategic Plan consisted of specific targets (e.g., reduction of crash rate/death rate), outcomes, pillars, and foundations of the strategic planning as in Figure 8 were developed.

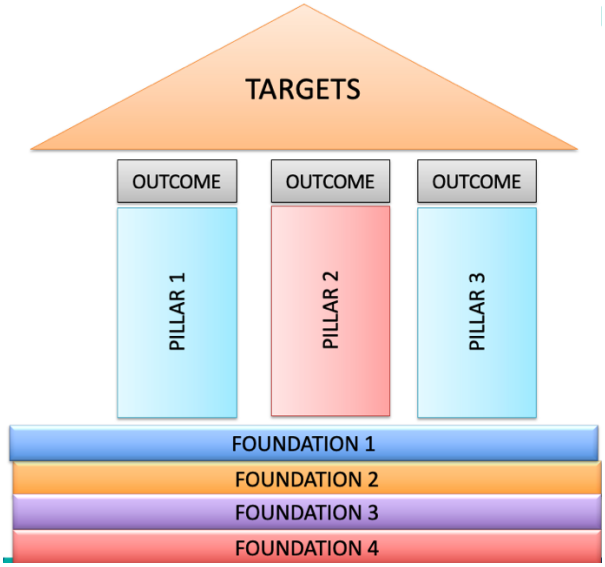

Figure 8: The framework of Road Safety Strategic Planning.

The first session of the workshop would start with comprehensive discussions between all participants to develop a reliable, attainable, and steadfast target based on the road safety data and trend over several years, the capability of each department to commit, and sufficient budget to be relied on. After the targets were established, the rest of the framework was developed together. Since local communities were known to have first-hand info on their district's road safety conditions, the next session of the workshop was focused on listing out all the riskiest road sections and the factors of crashes in their district (these lists were then validated by the Royal Malaysia Police and local council offices).

Finally, the implementation-plan template combining all pillars, outcomes, key performance indicators, intervention projects, locations, and responsible departments was filled out and put together as the Road Safety Strategic Planning. These plans were revisited in periodic meetings chaired by the district officer for the respected districts. The projects were very successful as the cooperation from the local people was fully utilised in developing the framework and during the periodic meeting, creating a sense of belonging for the local people that worked together to upgrade their district's road safety performance.

Among the completed 'Road Safety Strategic Plan' was Pulau Pinang (planning for 2014 - 2020), Batu Pahat District in Johor (planning for 2016 - 2020), followed by Kota Bharu in Kelantan, Kuala Rompin and Bentong in Pahang, and just recently Kangar in Perlis. The strength of these 'Road Safety Strategic Planning' was the key performance indicators, the measurements, interventions project, the key performance index (KPI) for each project, and the responsible agency for each intervention project listed as the outcomes of the strategic planning framework.

8. My Safe Road*:* Experiences from Kota Bharu District, State of Kelantan, and Kuala Rompin District, State of Pahang

Kota Bharu is the capital district of Kelantan, situated in the north-eastern state of peninsular Malaysia, bordering Malaysia and Thailand. Kota Bharu is a unique district that combines various traditional architecture from various populations background from Malay, Chinese, and a minority of Siamese. A total area of 115.64 km^2, as pictured in Figure 9, and an approximately 314.964 (as of 2010) population make Kota Bharu overcrowded with 2,724 inhabitants/km^2.

Figure 9: Geographical locations of Kota Bharu, Kelantan.

By looking at the average daily traffic (ADT) for Kelantan states in Table 4, Kota Bharu was seen as the busiest district with more than 50% higher ADT compared to the other route from the year 2009 until 2018.

Aware of the seriousness of road safety issues in Kota Bharu, Jabatan Keselamatan Jalan Raya (JKJR) Kelantan had set up a workshop in developing road safety strategic planning for Kota Bharu in February 2017.

Table 4: ADT for Kelantan states from 2009 to 2018.

BIL *No*	STESEN *Station*	KM	LOKASI *Location*	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
			KELANTAN										
27	DR 201	19.3	Kota Bharu - Melor	43,222	31,602	37,939	42,433	32,263	26,043	39,257	28,405	65,518	66,933
28	DR 603	6.1	Km Lebuh raya Timur-Barat	5,296	5,440	5,863	6,275	6,029	6,141	4,718	6,344	6,300	6,389
29	DR 802	61.5	Kota Bharu - Kuala Krai	19,521	20,632	22,308	23,381	21,200	22,523	23,345	21,969	22,160	22,550

After agreed on the target of 10% reduction in the total number of deaths, the number of crashes and number of deaths among motorcyclists, and the number of serious injuries as the essence of the strategic planning, four main pillars, i.e., safe infrastructure, safe motorcycles, safe vehicles, and behaviour changes had been chosen. These four pillars had resulted in 25 expected outcomes developed at the end of the workshop that made a Road Safety Strategic Planning for Kota Bharu.

Following the success in developing Kota Bharu road safety strategic planning, another road safety strategic planning for the

district, namely Rompin in Pahang, was also developed. Adopting the same method as in Kota Bharu, Rompin's very own road safety strategic planning was successfully developed in April 2017.

Kuala Rompin is the main town of Rompin and famously known as the Sailfish Capital of Asia. It is located on the southeast coast of Peninsular Malaysia facing the South China Sea. Kuala Rompin is the only district located between Johor and Pahang, making their local roads as the primary roads for those commuting between these two states. Rompin is populated by almost 96% of native ethnics, including Malays and indigenous peoples, making the development of the road safety strategic planning for this district unique and challenging since indigenous peoples are known to be populated among themselves without being affected by modernizations.

The road safety strategic planning for Rompin had set up a 15% yearly reduction, which was comprehensively distributed among several implementation plans and intervention projects. After series of engagements with the local communities, it was found out that local engagement sessions were the most appropriate way to use in gathering the authentic and fresh local road safety issues whereby strategic planning could be initiated targeted at the real cause.

Apart from that, it was also learned that although these districts are different in economic background (Kota Bharu – small and medium business activities, Kuala Rompin – fishing industry), some of their local issues were somehow affect equally in certain pillars, as shown in Table 5 below.

Table 5: Summary of targets and pillars for two districts.

	Kota Bharu	**Kuala Rompin**
Target	10% yearly reduction in : -Total death -Total motorcyclist death -Number of crash -Total serious injuries	15% yearly reduction in : -Number of total death -Number of crash
Pillars	-Safer infrastructure -Safer motorcycles -Safer vehicles -Behavioural changes	-Safer infrastructure -Safer vehicles -Behavioural changes

In different perspectives, although it may seem that the same pillars will eventually produce similar outcomes however the real challenges lie in reaching for the communities to adapt and adopt safe behaviours while travelling on the road. Kuala Rompin, for example, is also inhibited by indigenous peoples from Jakun and Temoq tribes (Carstens, 1998; Dentan & Charles, 1997) who have different location-setting and ways of dealing with law and enforcement.

Having to cope with the language differences with the local authorities leaves them behind in road safety issues such as road regulations and law. Other than that, the authorities also have difficulties tracking their settlement for any misfortunate events happening because of them. Because of this, the challenges faced by the Kuala Rompin committee are huge and incomparable with other districts, although they shared the same pillars as other districts.

The differences in land use for these two districts also played major parts in developing and achieving the targets. However, the targets of reduction in death rates, motorcyclist death, number of crash and total serious injuries for Kota Bharu that are more populated, higher development rates and economic turn-over than Kuala Rompin seems to be quite difficult to develop since it involved various modes of transportations and local behaviours thus dealing with local understanding in road safety was quite challenging.

This is a one-of-a-kind issue that can only be discovered through community engagement initiatives. These classic examples may not be the same as in other unexplored communities. However, the road safety agencies may be surprised by other local issues emerging from other community engagement sessions. Through these experiences, there is no doubt that local issues raised by the local community must be carefully addressed so that national planning to increase road safety performance could be achieved.

An example of the intervention plan set out for Kuala Rompin is presented in Table 6. For the Kuala Rompin district alone, more than 20 intervention projects across three pillars were developed. The first steering committee shows the success of this strategic plan with great cooperation from local departments. One of the feedbacks gathered from one of the local government agencies in Kuala Rompin is shown in Table 7.

Table 6: Implementation plan for Kuala Rompin.

PILLAR	***Infrastruktur yang lebih selamat.***	
HASIL	*Memastikan semua struktur haram dibahu jalan berjaya dirobohkan.*	
Penunjuk (KPI) dan Pengukuran untuk Hasil	*100% tiada aktiviti perniagaan atau pembinaan struktur tanpa permit di bahu jalan.*	
Intervensi/projek (sila sertakan deskripsi)	KPI output intervensi/projek	Tanggungjawab
1. Mengenalpasti lokasi struktur haram.	*100% senarai struktur atau gerai yang tiada permit dikeluarkan.*	*JKR/PBT/PEJ DAERAH*
2. Mengeluarkan notis menurun, mengosong dan meroboh.	*30 notis yang dikeluarkan sehingga hujung tahun 2017.*	*JKR/PBT/PEJ DAERAH*
3. Mengambil tindakan undang-undang dan penguatkuasaan.	*15% tindakan undang-undang dilaksanakan*	*JKR/PBT/PEJ DAERAH*
Intervensi/projek	LOKASI DAN JADUAL PELAKSANAAN	
1. Mengenalpasti lokasi struktur haram.	*-Sepanjang laluan FT12 dan FT3* *-15% siap sehingga hujung tahun 2017.*	
2.Mengeluarkan notis menurun, mengosong dan meroboh.		
Mengambil tindakan undang-undang dan penguatkuasaan.		

Table 7: Feedback from local government agency in Rompin.

Bil.	Intervensi/Projek	KPI Output	Tanggungjawab	Lokasi/Jadual Pelaksanaan	Status Pelaksanaan
1	Mengenalpasti lokasi struktur haram.	100% senarai struktur atau gerai yang tiada permit dikeluarkan.	JKR/PBT/PEJ DAERAH	- Sepanjang laluan FT12 dan FT3. - 15% siap sehingga hujung tahun 2017.	-FT12 : 44 nos papan tanda haram dikenal pasti. -FT03 : 82 nos papan tanda haram dikenal pasti.
2	Mengeluarkan notis menurun, mengosong dan meroboh.	30 notis yang dikeluarkan sehingga hujung tahun 2017.	JKR/PBT/PEJ DAERAH	- Sepanjang laluan FT12 dan FT3. - 15% siap sehingga hujung tahun 2017.	-44 notis telah dikeluarkan pada 15/02/2016 di FT12. -82 notis papan tanda haram telah dikeluarkan pada 29/03 2016 di FT03. -Notis baru /ulangan akan dikeluarkan pada tahun ini.
3	Mengambil tindakan undang-undang dan penguatkuasaan.	15% tindakan undang-undang dilaksanakan.	JKR/PBT/PEJ DAERAH	- Sepanjang laluan FT12 dan FT3. - 15% siap sehingga hujung tahun 2017.	Siap.

This program had a hard time maintaining their continuity after the dissolution of JKJR. Specifically, JKJR was rebranded as Bahagian Keselamatan Jalan Raya with smaller workforce and budget. However, Kuala Rompin's strategic planning managed to show great success after one year by reducing 21% of road crash death beyond the targeted 15% reduction per year. This achievement stood as evidence that participation of local communities in road safety planning and implementation gives incredible benefit in reducing the number of crashes and deaths.

9. Summary

Numerous actions and countermeasures have been done in fighting the global burden of road crashes. The action taken to ensure road safety includes improving the road infrastructure, strengthening the policies and governance, law enforcement, better vehicle standards, and improved post-crash response. Apart from that, government and non-government sectors also promote road safety campaigns endlessly to create awareness, such as increasing seatbelt use and helmet wearing while reducing speeding and drunk driving. These initiatives are generally implemented at the national level as one-size-fits in combating road safety issues. However, this approach might be ineffective, for example, when using misleading road safety indicators that do not suit the targets and reflect the true progress of road safety performance.

Hence, to ensure that safety aspects are well blended and promising, the initiatives need to be done first and foremost at local levels. This is aligned with WHO aspirations that encourage and guide countries to establish and implement road safety plans adapted to reflect the countries' settings. The justification is that while safe systems approaches are universal, their application should be tailored to the local context. Therefore, localising road safety implementation may offer more effective interventions, especially at the local level, targeting the specific road safety issues with the right road safety indicators. However, to realise this approach requires the involvement of communities as stakeholders that need to work hand in hand with authorities in promoting better road safety.

This paper presented a review that highlighted an approach of localising road safety by engaging communities in developing a proactive road safety countermeasure to reduce the road crashes rate in Malaysia. Based on the study's discussions, it can be concluded that engaging the communities in road safety at local level seems to address the needs satisfactorily for a better outcome to tackle the road safety issues. Furthermore, by recognising the authentic road safety issues provided by the local communities, specific indicators and interventions could be established to achieve the specific targets that provide the essence of evidence-based. Apart from that, this local outcome-based approach can also be synergised with national initiatives to increase the effectiveness of road safety implementation and help reduce the crash rate.

This paper aims to highlight the importance of having a community engagement by sharing the experience of developing road safety strategic plan for two districts, it is once worth highlighting that localising road safety at the local level by engaging the communities that need to be carried out not only at one time but as an ongoing process. The involvement from the communities provide a better understanding that draw together existing road conditions and environment knowledge as comprehensively as possible with recent experience from local communities. Hence, this can provide fruitful insight into the cause and prevention of road crashes and aid policymakers in developing a holistic road safety plan; thus, Malaysia's very own road safety performance index could be realised.

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