

MALAYSIA'S SECURITY AND CRIME INDEX: DEVELOPMENT, INDICATORS AND KEY EMPIRICAL FINDINGS

**Noor Zahirah Mohd Sidek, Nik Azmi Nik Omar, Wan Nailah
Abdullah, Mohd Rizaimy Shaharudin, Sahubar Ibrahim
Ismail Gani**

ABSTRACT

Security index serves as an indicator for a crime used as a basis for policymaking, enacting new laws, revising existing law, or undertaking new programmes or approaches to reduce and combat crime. The current crime index considers only thirteen (13) types of crime, which may be inadequate to correctly depict the nature and severity of crime in Malaysia. As novel and more sophisticated crimes emerge, leading to more complex modus operandi, the calculation of crime should also transform to accommodate these changes. This paper proposes a preliminary development and indicator for a more holistic Security and Crime Index for Malaysia. A sample of calculation is provided and discussed. Ideally, two types of index calculation based on (i) threshold value and per 100,000 populations and (ii) index based on base 100 should be considered. A future recommendation is provided as a way forward.

Keywords: *Security, Crime, Indicators, Framework*

1. INTRODUCTION

A stable and peaceful environment is one of the basic requirements for an economy to develop and grow. Public security and safety play a pivotal role in promoting a peaceful environment. To further promote public security and safety, new policies and programmes must be designed in line with the current trends in crime. Policies and programmes designed by policymakers and relevant authorities should be data-driven and not merely a knee-jerk reaction to arising issues. Real-time data is vital for these policymakers to make

informed and evidence-based decisions. A proper and holistic calculation of security and crime is paramount to ensure efficient and effective solutions via new policies and programmes.

There are various indices and methodologies used to assess the level of security by various international agencies. The Institute for Economics and Peace established and developed Global Peace Index with its headquarter in Sydney, Australia. Safe Cities Index was established by The Economist Intelligence Unit (EIU) based in London, United Kingdom. The International Statistics on Crime and Justice is under the United Nations Office on Drugs and Crime, and the European Institute for Crime Prevention and Control, affiliated with the United Nations (HEUNI), is based in Finland. The Rule of Law Index was developed and managed under Singapore's World Justice Project, Smart Nation. Other security-related indices include Mercer's Quality of Living Ranking, Monocle's Quality of Life Survey, Deutsche Bank Liveability Survey emphasizes the security aspects to ensure public order and better quality of life.

Malaysia is a unique country with a multi-racial population guaranteed their rights, including safe living conditions. Being a multi-racial country would mean the possibility of internal conflicts within the different races, which could threaten national security and harmony. Therefore, Malaysia must be prepared to deal with potential threats. Examples of threats include (i) the fragility of national unity when a sensitive issue related to religion and race are being raised, (ii) movements to create political instability or overthrowing the government through means outside and within the democratic process, (iii) illegal immigrants and refugees which impacted the country such as the spread of COVID-19 pandemic in Sabah started by the illegal immigrants; social, crime and national diplomatic relations would be impacted directly or indirectly, (iv) cybercrime, (v) extremism and terrorism such as DAESH and Abu Sayyaf groups, and (vi) cross border crime as Malaysia is located in a strategic position in the Southeast Asian region which makes her susceptible to smuggling, money laundering, and even sea pirates. Therefore, information on the correct security and crime position is

vital for the Home Ministry to act and respond quickly and efficiently.

The present crime index in Malaysia is based on only thirteen (13) types of crime under violent and property crime. With the development of information technology, crime has shifted from traditional crime to more sophisticated crime using technology. In addition, the existing index calculation uses less accurate and reliable data due to the limited under-reporting crimes that the victims did not report. For the reported cases, there were possibilities of the exclusion in the index for the criminal element cases of No Offence Declared (NOD), Refer to Magistrate (RTM), or No Further Action (NFA), as the reporting depends on the classification by the investigator (Santhana Dass, 2019). Therefore, relying on the thirteen (13) indicators may be inadequate and misrepresentative based on these circumstances. If these figures were used for policymaking, the probability of improvements in new policies could be undermined. Given these challenges, the objective of this study is to propose the Security and Crime Index for Malaysia. The development framework was laid out, and indicators were proposed, followed by examples of calculations of the respective indices.

This paper is organized in the following manner. The next section provides an overview of the current state of crime in Malaysia. Section 3 proposes the basis of the framework, criteria to be included in each index, and an overall element of the Security and Crime Index. Section 4 presents the methodology used, and section 5 discusses the findings. Section 6 concludes and provides some way forward.

2. CRIME IN MALAYSIA

According to the Department of Statistics Malaysia, Malaysia's crime index ratio per 100,000 people improved to 256.6 in 2019 from 273.8 in 2018. All states had a decrease in their crime index ratios except for Pulau Pinang (3.7 per cent), Sarawak (4.2 per

cent}, and Terengganu (1.3 per cent). In 2019, seven states reported crime index per 100,000 population ratios lower than the national average, namely Sarawak (214.6), Perlis (207.5), Perak (195.8), Pahang (195.7), Kelantan (188.2), Terengganu (150.3), and Sabah (143.5) (DOSM, 2021). All losses from criminal activities were documented based on the data from the Customs Department (JKDM), Border Agency (AKSEM) and the Department of Crime Investigation (JSJ), and the Department of Commercial Crime (JSJK) of the Royal Police of Malaysia (PDRM). From January to September 2020, there were approximately RM1.4 billion losses were recorded. Commercial crime logged a total of 15,069 cases with losses of RM648,079,306.82. The highest losses were from telecommunication fraud involving RM256,863,878.35. Table 1 summarizes the top 5 highest losses by type of crime. Land fraud witnessed losses amounting to RM175,084,234.56 (27.02% of the total commercial crime or 116 cases), followed by investment fraud, RM159,310,221.38 (24.58% or 1,303 cases) and Macau Scam, RM158,497,395.77 (24.46% or 1,988 cases).

Table 1: Top 5 Highest Losses based on Type of Crime

Type of Crime	Reported Losses (RM) million
Telecommunication Fraud	256.8
Land Fraud	175.08
Investment Fraud	159.3
Macau Scam	158.5
Loan Fraud	54.4

Source: PDRM (2020). Data is from January to September 2020.

The COVID-19 pandemic and the consequent nationwide movement control order (MCO) saw a transition from violent-type crimes to cybercrimes. Communication fraud recorded the highest number of cases (5,218 cases) followed by buying fraud (5,048 cases), loan fraud (4,942 cases), Macau Scam (1,988 cases), African Scam (1,376 cases), and investment fraud (1,180 cases). Table 2

illustrates the top 5 highest number of cases based on the type of crime. Another form of cybercrime, cryptocurrency fraud, recorded an increase from 73 to 110 cases or a 50.68% increase between 2019 and 2020. The Customs Department recorded a total of RM532,614,595.01 confiscations, mainly from drugs and drug precursors.

Table 2: Top 3 Highest Cases based on Type of Crime

Type of Crime	No. of Cases
Telecommunication Fraud	5,128
Purchase Fraud	5,080
Loan Fraud	4,942
Macau Scam	1,988
Investment Fraud	1,303

Source: PDRM (2020). Data is from January to September 2020.

Table 3 shows the number of cases and value of losses incurred by telecommunication fraud by state. Selangor and Kuala Lumpur recorded the highest value of losses and highest number of cases, respectively. The total loss amounted to RM256,863,878.35 (5,128 cases) from January to September 2020. Selangor lost RM84,313,547.96 with 828 cases, followed by Kuala Lumpur at RM54,505,490.37 (913 cases) and Johor recorded RM28,313,898.82 with 713 cases. Kelantan, Kedah, and Perlis recorded the least number of cases. Kelantan at RM5,195,096.62 (151 cases), Kedah at RM3,893,992.75 (180 cases). Based on Table 3, telecommunication fraud tends to be more predominant in the richer states of Malaysia. On average, richer states have better access to the internet and hardware to facilitate online purchases and transactions using telecommunication devices such as smartphones, making them more susceptible to telecommunication fraud.

Table 3: Telecommunication Fraud by State

CONTINGENT	CASES	LOSSES (RM)
Selangor	868	84,313,547.96
Kuala Lumpur	913	54,505,490.37
Johor	713	28,312,898.82
Pulau Pinang	533	15,539,315.97
Perak	374	13,346,897.14
Sarawak	265	11,159,386.16
Pahang	247	10,756,791.29
Melaka	233	8,440,458.99
Negeri Sembilan	321	7,674,682.03
Sabah	236	7,401,692.06
Terengganu	126	5,390,480.97
Kelantan	151	5,195,096.62
Kedah	180	3,893,992.75
Perlis	58	933,147.22
TOTAL	5,218	256,863,878.35

3. PROPOSAL FOR FRAMEWORK

This section introduces the basis of the framework and discusses the classification and types of crime, which will be the foundation of the calculation of the crime indices.

3.1 *Basis of framework*

The basic framework used in this study is based on the Security and Public Order Policy (Dasar Keselamatan dan Ketenteraman Awam, henceforth, DKKA), launched in 2019. DKKA is the extension of the National Security Policy (Dasar Keselamatan Negara, henceforth DKN) to address security issues and challenges within the judiciary of the Home Ministry. Following industrial evolution

4.0, the extensive development of the internet of things, artificial intelligence, and big data analytics, risks and threats against our national security have become increasingly complex and beyond national borders. Therefore, DKKA was designed to address these emerging challenges and invoke a closer relationship between the enforcement agencies and the community to combat crime.

DKKA encompasses six (6) main thrusts, which include (i) preservation of the supremacy of the constitutions, the rule of law and key institutions, (ii) improving the governance and integrity of security enforcement agencies, (iii) strengthening border security, (iv) ensuring public security and order (v) combating drugs, and (iv) protecting the country's essential assets and targets. A total of twenty-one (21) specific strategies were designed to ensure the delivery of the thrusts. The strategies, amongst others, is the protection of the Federal Constitution which include the parliamentary democracy under a constitutional monarchy, and the separation of power within the Legislative, the Judiciary and the Executive bodies, improving the effectiveness of security governance which adequate check and balance processes, update security assets and usage of current technologies, continuous professional and skill development amongst the enforcement team, implementation of an integrated border security measures, empowerment of intelligence and enforcement of cross-border crime, strengthening the management of foreigners, combatting all types of crime (inter alia cybercrime, commercial crime, theft, drug trafficking), extremism, terrorism, espionage and the spread of movement of beliefs or elements that contradicts the Malaysian socio-culture and public order, enhancement of crime rehabilitation and correctional programmes, and protection the country's critical assets.

The proposed indices will also be based on the construct of the agencies and departments under the Home Ministry (KDN). The leading agencies and departments are the Royal Malaysia Police (PDRM), the Malaysian Maritime Enforcement Agency (APMM), the Malaysian Prison Department (PRIDE), the Immigration

Department (JIM), the National Registration Department (JPN), the Registry of Societies Malaysia (ROS), the Malaysian volunteer corps (RELA), Eastern Sabah Security Command (ESSCOM), National Anti-Drug Agency (AADK), the Institute of Public Security of Malaysia (IPSOM), Council for Anti-Trafficking and Anti-Smuggling of Migrants (MAPO), Prevention of Crime and Terrorism Board, Parole Board, Film Censorship Board, Al-Quran, and Printing Board. The Border Security Agency (AKSEM), which was established in 2017, was dissolved and placed under the jurisdiction of PDRM in 2021. The construction of indices, however, is subjected to data availability sourced from these agencies. Nine (9) out of fifteen (15) agencies contributed data for the index construction and calculation. The agencies are Customs Department, AKSEM, PDRM (JSPT, JSJ, JSJ – cybercrime, JSJK), JAKIM, KDN, FELDA (KDN), and APMM. The available data, however, can only be mapped to Thrust 2-4 of the DKKA.

3.2 Types and Classifications of Crime

This section considers the index development criteria based on the methodology employed by PDRM and the Department of Statistics, Malaysia. Based on the definitions by PDRM, the crime index is the assessment of the state of general crime in Malaysia. Specifically, a crime index can be defined as recorded crimes with enough frequency and significance to be useful as a barometer of crime trends (Sidhu, 2015). In other words, an index crime often occurs and frequently enough to warrant inclusion in the index. As reported by the Department of Statistics, the existing calculation method is based on the calculation method of crime index conducted by PDRM. The existing method considers two (2) major types of crimes, violent-related crimes and property crimes (Santhana Dass, 2019). There are thirteen (13) crime categories used for the index calculation. Violent-related crimes include homicide, rape, group robbery with firearms, group robbery without firearms, armed robbery, robbery without firearms, assault, and assault and battery. The list of property crimes included in the calculation is theft, car theft, motorcycle theft, van theft, truck, heavy machinery, burglary,

and snatch theft. Other types of crime such as narcotics, corruption, vandalism, embezzlement, or fraud are not accounted for in the calculation of the crime index.

This study proposes a few more indices to complement the existing crime index to reflect a more holistic crime scenario in Malaysia. Significantly, we propose three (3) different indices, which are (a) Commercial Crime Index, (ii) (Public) Crime Index, and (iii) Confiscations Index (for illegal movements of goods across borders and entry points in Malaysia).

Economic growth and development had brought about prosperity and sophistication in the trade and financial sectors. In the era of digitalization, the usage of electronic payments and the proliferation of online transactions, including online banking and other financial services, has propagated the increase in commercial crimes and cybercrime. First, the proposed commercial crime index will consist of the following type of crimes, namely non-existent loans, online fraud, Macau scam, African scam, SMS fraud, business email compromise, investment fraud, credit card fraud, disguise with intent, witchcraft fraud, cheque fraud, land fraud, and other types of fraud relating to commercial activities. Two types of calculations will be presented. The first is based on the number of cases, and the second is based on the value of loss due to the crime. The formula is outlined in Section 4.

Second, the (Public) Crime Index extends the existing crime index as reported by PDRM and the Department of Statistics. In the proposed extension of the crime index, crime will be categorized under ten (10) different types of crime. The new categorization is as follows:

- (a) Homicide
 - Physical murder
 - Death caused by a hit and run

- (b) Attack or offences affecting the human body
 - Hurt (Panel Code 323)
 - Hurt by dangerous weapon (Panel Code 324)
 - Causing grievous hurt (Panel Code 325)
 - Causing grievous hurt using dangerous weapons (Panel Code 326)
- (c) Rape
- (d) Kidnapping
- (e) Illegal gambling
- (f) Crime by non-citizens
- (g) Vandalism
- (h) Criminal Intimidation, Insult, and annoyance
 - Criminal intimidation (Panel Code 506)
 - Criminal intimidation by anonymous communication (Panel Code 507)
- (i) Robbery
 - Gang robbery with firearms
 - Gang robbery without firearms
 - Robbery with firearms
 - Robbery without firearms
 - Robbery when armed or with an attempt to cause death or grievous hurt
 - Burglary
 - Car theft
 - Motorcycle theft
 - Van/lorry/ heavy machinery theft
- (j) Seditious and defamatory
 - Cases related to the King
 - Cases against government agencies
 - Cases against the government

Third, Confiscation Index should include confiscation of unpermitted goods across borders via legal points such as land entry points, maritime entry points, and airspace entry points. Land crossing points can be divided into 'official' and 'unofficial' entry points. The official entry points are the designated entry points at the border, such as, among others, ICQS Bukit Kayu Hitam, CIQ Johor Baru, CIQ Padang Besar, CIQ Rantau Panjang. Maritime entry points include seaports like Penang Port, Port Klang in Selangor, Port of Tanjung Pelepas in Johor. The unofficial entry points are generally illegal crossing points by transnational organized crime, used for human trafficking, illegal immigrants, and smuggling. With the development of the internet of things, virtual borders are becoming more critical and imposing a burgeoning threat, especially to groups lacking knowledge and information in cybercrime. The power to seize unpermitted and prohibited goods is held by the Customs Department, PDRM, AKSEM (previously in 2020), and APMM. Confiscation of goods comes in the form of controlled goods, taxable goods, prohibited goods, and other types of goods or commodities illegally brought into Malaysia. Examples of the various form of goods are as follows:

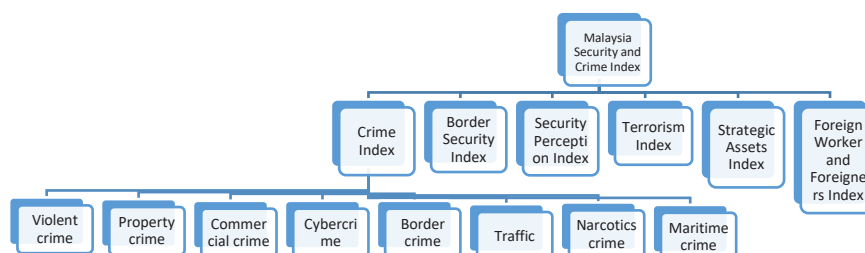
- (i) Controlled goods
 - Rice
 - Flour
 - Diesel
 - Petrol
 - Animals
 - Wood
 - Fruits
 - Fish
 - Consumer goods
 - Poison
 - Cough medications

- (ii) Taxable goods
 - Agriculture goods
 - Clothing
 - Alcoholic beverages
 - Cloned vehicles and parts
 - Cigarettes, vape, vape liquid, tobacco
- (iii) Prohibited goods
 - Drugs
 - Drug equipment
 - Firearms
 - Firecrackers
 - The prohibited film, publications
- (iv) Other Goods / Commodities
 - Confiscated vehicles
 - Currency
 - Healthcare products
 - Cosmetics
 - Other commodities

3.3 Security and Crime Index of Malaysia

A holistic security and crime index should encompass a host of other indices. A plausible structure for Malaysia's Security and Crime Index should include the following sub-categories, formulated into an index. The crime index should include violent, property, commercial, cybercrime, border crime, traffic, narcotics, and maritime crime. The overall Security and Crime Index should include crime index, border security index, security perception index, terrorism index, strategic asset index, and foreign worker and foreigners' index. Figure 1 shows the proposed overall items that should be included in Malaysia's Security and Crime Index calculation.

Figure 1: Proposed model for the Security and Crime Index of Malaysia



Ideally, the calculation should be based on the Panel Code for the specific agencies on the designated criminal activities leading to confiscating the goods. In addition, the index calculation should be based on (i) threshold values and per 100,000 population and (ii) 100 as the base. In summary, this section outlines the items or elements for the calculation of each proposed index. The following section delves into the formulae used to calculate the index.

4. METHODOLOGY

The calculation of the crime index is based on the formulation used by PDRM. The crime index from January to September 2020 is calculated using the following steps. The first step involves the identification of the number of crimes recorded and the total population. The second step is to calculate the current crime index, followed by the third step, which calculates the threshold value for the current year. The fourth step is to calculate the changes in the number of cases vis-à-vis the calculated threshold value. The following steps elaborate on the mechanism of calculation.

Step 1: Identifying the number of criminal cases and total population

- (i) Number of violent crime and property theft recorded
- (ii) The total population in Malaysia in the current year

The total population considers all citizens of Malaysia, which includes all Malaysian and non-Malaysian. Non-citizens are the:

- (i) Registered non-Malaysian students
- (ii) Registered foreign workers
- (iii) Unregistered foreign workers
- (iv) Permanent residence

Data on the total population is sourced from the Department of Statistics, Malaysia (2020).

Step 2: Calculation of the crime index per 100,000 population

The crime index for 2020 is as follows:

$$\text{Crime Index} = \frac{\text{Number of cases}}{\text{Total Population}} \times 100 \quad (1)$$

The crime index in 2020 is estimated to be 124.41 per 100,000 population,

which shows a contraction in crime rate vis-à-vis 2019 which stood at 256.6 per 100,000 (Department of Statistics, 2020) and 278.8 per 100,000 population in 2018 (Department of Statistics, 2019). These figures imply a decreasing trend in violent crime and property theft over the last three (3) years.

Step 3: Calculation of the threshold value

The threshold value for 2020 is calculated as follows:

$$\text{Threshold} = \frac{\text{Crime Index} \times \text{Total Population}}{100,000} \quad (2)$$

Step 4: Calculation of the change in the number of cases

Change in the number of cases for 2020 is estimated as follows:

$$\text{Change in the number of cases} = \text{Total Cases for 2020} - \text{Threshold for 2020} \quad (3)$$

The percentage change is calculated as below:

$$\text{Percentage change} = \frac{\text{Change in the number of cases}}{\text{Threshold}} \times 100 \quad (4)$$

Based on the example above, the crime rate has decreased by 51.88% for every 100,000 population from January to September 2020.

For other types of indices, the general formula per 100,000 population will be as follows:

$$\text{Index A} = \frac{\text{Number of cases in Crime A (2020)}}{\text{Total Population (2020)}} \times 100,000 \quad (5)$$

or

$$\text{Index A} = \frac{\text{Cost incurred by Crime A (2020)}}{\text{Total Population (2020)}} \times 100,000 \quad (6)$$

For this study, the main crime index will be calculated using Equations 1-4. The proposed additional indices, (public) crime index, confiscation index, and commercial crime index, will rely on Equations 5 and 6. The following section presents the empirical findings.

5. KEY FINDINGS

The calculation for the crime index is based on Equation 1-4 for January to September 2020, where the number of violent crime and property theft recorded is 40,706 cases, and the total population in Malaysia in 2020 is 32,719,523 people is as follows.

$$\text{Crime Index} = \frac{40,706}{32,719,523} \times 100,000 = 124.41 \text{ cases per } 100,000$$

$$\text{Threshold} = \frac{124.41 \times 32,719,523}{100,000} = 40,705.7 \text{ cases}$$

$$\begin{aligned} \text{Change in the number of cases} &= \text{Total Cases for } 2020 - \\ \text{Threshold for } 2020 &= 40,706 - 84,602 = -43,896 \end{aligned}$$

$$\text{Percentage Change} = \frac{43,896 - 84,602}{84,602} \times 100 = -51.88\%$$

Table 4 shows the estimation of threshold and target percentage for the crime for 2017 to 2020. Results show a gradual downward trend in terms of the threshold and target percentage for 2017-2019. Abrupt changes were recorded in 2020, which showed a significant decline in crime due to the movement control order to curb the spread of COVID-19. In 2020, the crime reduction was approximately 52% of the threshold value.

Table 4: Estimation of Threshold and Target Percentage for Crime for 2017 – 2020

Year	Threshold Value	Achievement	+/-	%
2017	114,043	99,168	-14,875	-13.04
2018	100,611	88,662	-11,949	-11.88
2019	89,908	83,456	-6,452	-7.18
2020	84,602	40,706	-43,896	-51.88%

Source: PDRM (2020). Changes in 2020 are based on the authors' estimation. Data is from January – September 2020 only.

Figure 2 graphs the crime index from the year 2015 to 2020. There has been a consistent downward trend in violent-related crime and property theft. The crime rate is almost half in 2020 in comparison with 2019 is since the year 2020 considers data from January to September 2020. Another reason contributing to the

lower crime index is the various movement control orders imposed during the pandemic, which restricted the movement of people, hence suppressing violent crime and property theft.

Figure 2: Crime Index (2015 – 2020)



Source: department of Statistics Malaysia (2016-2020). Crime Index for the year 2020 is estimated based on crime data from January to September 2020.

$$\begin{aligned}
 \text{Commercial Crime Index} &= \frac{\text{Total Loss from commercial crime (2020)}}{\text{Total Population (2020)}} \times 100,000 \\
 &= \frac{\text{RM}648,079,306.82}{32,719,523} \times 100,000 \\
 &= \text{RM}1,980,711.35 \text{ per } 100,000 \text{ population}
 \end{aligned}$$

The (public) crime index or the modified crime index of PDRM is as follows.

$$\begin{aligned}
 \text{Crime Index} &= \frac{\text{Number of Cases (2020)}}{\text{Total Population (2020)}} \times 100,000 \\
 &= \frac{61,195 \text{ cases}}{32,719,523} \times 100,000 \\
 &= 187.02 \text{ cases per } 100,000 \text{ population}
 \end{aligned}$$

The results for the confiscation index is as below.

$$\begin{aligned}
 \text{Confiscation Index} &= \frac{\text{Value of Confiscated Goods (2020)}}{\text{Total Population (2020)}} \times 100,000 \\
 &= \frac{\text{RM}548,278,975.70}{32,719,523} \times 100,000 \\
 &= \text{RM}1,675,693.67 \text{ per } 100,000 \text{ population}
 \end{aligned}$$

In addition, data confiscation at the border is extracted from the total

data to enable the calculation of confiscation at the border. The results are as follows.

$$\begin{aligned}
 & \textit{Confiscation at the border Index} \\
 &= \frac{\textit{Number of cases at border (2020)}}{\textit{Total Population (2020)}} \times 100,000 \\
 &= \frac{510}{32,719,523} \times 100,000 \\
 &= 1.56 \textit{ cases per 100,000 population}
 \end{aligned}$$

In monetary value, the confiscation index at the border is as below.

$$\begin{aligned}
 \textit{Confiscation at border} &= \frac{\textit{Value of Confiscated Goods (2020)}}{\textit{Total Population (2020)}} \times 100,000 \\
 &= \frac{\textit{RM15,664,380.69}}{32,719,523} \times 100,000 \\
 &= \textit{RM47,874.72 per 100,000 population}
 \end{aligned}$$

The modified crime index shows a higher level of crime, 187.02 cases per 100,000 compared to 124.41 cases per 100,000 population. Therefore, we highly recommend the inclusion of other types of crime as proposed in Section 3. Such inclusion would also be parallel with the estimations of the Global Peace Index and the Rule of Law Project. Table 5 summarizes the findings of the indices. The results in Table 5 can be used to compare similar classifications of crime in the coming years. Only then, any meaningful inference could be made.

Table 5: Summary of Indices for Selected Crimes per 100,000 population for the year 2020

Type of Crime	Estimation per 100,000 population
Crime Index	124.4
Commercial Crime Index	46.1 cases
Losses from Commercial Crime	RM1,980,711.35
General Crime Index	187.02 cases
Confiscation Index	RM1,675,693.67

Losses from Confiscation Index	1.56 cases
Illegal Goods at Border Index	RM47,874.72

Notes: Crime Index is based on the definition by PDRM and the Department of Statistics.

6. CONCLUSION AND RECOMMENDATIONS

This paper proposes a framework to establish a more holistic security index for Malaysia pertinent to the functions of the Home Ministry. The basis of the framework is based on the 2019 Security and Public Order Policy. Based on available data and agencies under the Home Ministry, a list of criteria, items, and classifications was proposed. A sample of calculation is presented in the methodology sections, and results are discussed accordingly. Results show that the crime index in Malaysia has seen a continuous decline since 2015. However, the type of crime included is limited to only thirteen (13) items under violent-related crime and property theft, rendering that these figures may not truly reflect the actual crime rate in Malaysia. Therefore, the Home Ministry needs to provide information on various types of crimes that reflect the actual crime rate. The nature of crime has also evolved dramatically over the years, along with the rapid development in technology, resulting in the rise in cyber-related crimes.

Future security and safety index development should use a more detailed methodology and extensive calculation covering all the agencies under the Home Ministry. More specific details are as follows. First, the categorization of criminal activities should follow the Panel Codes of Malaysia, which is the basis of law for criminal offences and procedures in Malaysia. Crime index should include all offences under Chapter XIV: Offences Affecting the Public Health, Safety, Convenience, Decency and Morals, Chapter XV: Offences Relating to Religion, Chapter XVI: Offences Affecting the Human Body, Chapter XVII: Offences Against Property, chapter XIX: Criminal Breach of Contract Services, Chapter XXI: Defamation, Chapter XXII: Criminal Intimidation, Insult and

Annoyance and Chapter XXIII: Attempts to Commit Offences.

Second, real-time data is a critical input for policy decisions. Crime and security data should be tracked in real-time, highlighting disruptions in security, especially from terrorism threats, and necessary measures could be undertaken immediately. Data should be available for policymakers to view at any time. Data from PDRM, for example, should be made available by the end of the month or in the first week of the following month. Digitalization is an essential tool to ensure real-time data could be imputed into the system and viewed by relevant officials. New estimation methods could forecast potential crimes, especially cybercrimes, drug trafficking, terrorism, or internal conflicts such as racial conflict, to provide early warnings of turning points in criminal activities. Timely information on potential criminal activities is of particular importance to cushion the ramifications if such a crime were to occur.

Third, the security and crime index should also be calculated on an annual basis to examine positive or negative changes in the overall security in the country. Indices provided in percentage terms are easier for the public to comprehend. In addition, data sharing serves as one of the approaches to educating the public on crime.

In conclusion, there is an urgent need to have an organized, comprehensive methodology in calculating the security and crime index. To ensure the workability of the index, data collection should be in line with the functions of the agencies and departments and should be made available in real-time. Hence, information technology and digital support are critical factors to ensure Malaysia's robust security and crime index.

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