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## **AIMS AND SCOPE**

The Journal of Defence and Security is a publication of the Malaysian Institute of Defence and Security, MiDAS. The journal publishes original papers and reviews covering all aspects of defence and security. It is a platform to promote awareness on the capabilities and requirements of modern defence & security technologies and policies, covering topics in the areas of, but not limited to, Evolution of Military Information & Communication Systems, Smart Weapons, Modern Vehicle & Aerospace Engineering Challenges, Intelligence, Surveillance & Reconnaissance, Biological & Chemical Terrorism Countermeasures, Personnel Protection & Performance, Military Medicine, Emergent Naval Technology, and Defence & Security Strategic Management.

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## **MALAYSIAN DEFENCE INDUSTRY: CONTEXT, CHALLENGES AND THE WAY FORWARD**

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### **ABSTRACT**

*The Malaysian defence industry (MDI) sector began in the 1970s as a result of privatization of several Armed Forces (MAF) facilities. The MDI is said to have evolved steadily over the past 50 years and has been a catalyst to infusion of emerging and high-technologies into the country. However, some argue that the growth of the MDI is still modest compared to other countries in the region. Further, the sector is seen as pervasive and lacks visibility as a main stream contributor to Malaysia's industrial and technological growth. Despite the huge investments into developing this industry, the outcome has been dismal and still mired by continuous challenges. What are the reasons for the MDI to be trapped in a vicious cycle despite continuous state policy intervention to support and promote this sector? This paper intends to achieve four main objectives which are: (1) to discuss the historical evolution and contextualise Malaysia's current defence industrial capability; (2) to mention the role of the Malaysian government in promoting the defence industrial sector; (3) to elaborate the challenges faced by the defence industry sector; and finally (4) to critically analyse how initiatives introduced in the Defence White Paper (DWP) 2020 may support the development of the Malaysian defence industrial base. This research paper is based on content analysis using data gathered from literature, policy documents, reports and semi-structured interviews. This paper concludes that despite the various challenges facing the MDI, there are huge opportunities for this sector to grow if the stakeholders focussed on strategies to develop specific niche industrial capabilities and further enhance Malaysia's industrial absorptive capability.*

**Keywords:** *Malaysian Defence Industry, Defence Self-reliance, Malaysian Armed Forces, Strategy, Defence.*

### **INTRODUCTION**

The Malaysian Defence Policy has clearly stated that a robust and self-sufficient MDI is a crucial component to support the overall Malaysian Armed forces (MAF) capability (MINDEF, 2010). The aspiration to develop a local defence industry is in line with Malaysia's defence philosophy which aims to achieve self-reliance in defence. The level of self-reliance is measured by the country's ability to defend its territorial integrity and national sovereignty using its own resources, without being dependent on foreign assistance (MINDEF, 2020; MINDEF, 2010; Sathyamoorthy, 2010). However, the level of which a country can achieve full capacity to attain self-reliance is of course questionable and highly contentious. In the case of Malaysia, the extend of military self-reliance that the country aspires to attain as opposed to the reality is based on the available resources and competing allocation between defence and security and other economic and social costs. Malaysia's self-reliance is stated to be on selected niche areas especially related to basic needs and critical assets, equipments and services including basic combat equipment;

limited to the ability of the MDI to be able to sufficiently manufacture, integrate, operate and maintain, repair and overhaul the defence products (MINDEF, 2020). However, COVID 19 has amplified Malaysia's vulnerability in relation to the ongoing tension between the U.S. and China in the region. For example, the complex maritime claims in the South China Sea, plus the increasing non-traditional security threats such as extremism, terrorism, and kidnapping for ransom (MINDEF, 2020). These issues require a review in Malaysia's defence spending and the industrial development policy. The Malaysian defence industry has aimed to achieve the required level of self-reliance in defence production, namely in spares and logistic support, modification, upgrades, retrofits, maintenance, repair and overhauls, mainly to cater the needs of the MAF, and especially in maintaining procured assets from overseas (Bitzinger, 2013; Balakrishnan, 2008). The MDI has grown considerably over the past five decades, and claimed to have led to economic spin-offs such as the creation of semi-skilled and high-skilled employment, value-added supply chain through technology transfer into niche sectors and exports of manufactured products and maintenance services, especially in the in dual-use sectors (MINDEF, 2020; Othman et al., 2019; Bitzinger, 2013).

Despite these encouraging developments, the growth and performance of the Malaysian defence industry does not commensurate with the level of investment. This is reflected by the lack of indigenous capabilities in design, manufacture and development of technologically advanced defence systems (Interviewee B, 2018; Interviewee D, 2019; Interviewee E, 2020; Bitzinger, 2013). In addition, the country's defence industry still lacks the ability to innovate and commercialise products or processes where Malaysia still imports 90% of major defence assets from overseas (MINDEFb, 2019; Wan Salleh, 2019). There is also a lack of local industry engagement at the outset of capability and procurement planning. Further, poor program management and oversight continue to hinder the successful implementation of procurement programs. Poor implementation has also led to the inability of local companies to secure sufficient work packages and jobs. .

In this context, this paper describes the current development and capability of the MDI, and the role of the state in promoting this industry sector. This paper further highlights the challenges facing the industry and finally suggests several policy actions that may contribute to the future growth and development of the MDI.

## **CONTEXTUALISING THE MALAYSIAN DEFENCE INDUSTRY**

### **Defining the Defence Industry**

Defence industrialisation is an obscure concept that has been described in various ways and used interchangeably in the literature. The term defence industry is also labelled as military industry; arms industries; arms production; and military production, among others (Bitzinger, 2015; Balakrishnan, 2008; Brauer, 1998). There is however a broad similarity about defence industrialisation which relates to the provision of military and strategic assets and services for the consumption of the country's armed forces for the purpose of national defence and security (Taylor and Hayward, 1989; Haglund, 1989; Banlaoi, 2009 in Torrenova, 2012). The end of World War II was marked as the point that started defence industrialisation for many countries. During the Cold War, many countries decided to create and maintain their own defence industrial bases to respond to any threat that came their way (Nosek, 2006). The national security policy of many countries required them to build and maintain an indigenous arms industry. At that time, it was argued that the defence industry did not only provide the necessary support to protect national interest, but was also an important contributor to national economy such as creation of employment, exports and having huge influence on other industries, especially through innovation (Othman et al., 2019; Bitzinger, 2013; Balakrishnan, 2008).

According to SIPRI 2019, 43 US arms companies dominated the top 100 firms in 2018, accounting for 59% of the total Top 100 arms sales companies. This is followed by 27 European companies in the list, which accounted for 24% of the total Top 100 arms sales companies; Russia (8.6%); and combination of six Japanese; three Israelis; three Indian; three South Korean companies; two Turkish; and one each in Australia, Canada and Singapore accounting for 8.6% of the total Top 100 arms sales in 2018 (Fleurant et al., 2019). The defence industry structure is unique; either competitive, oligopolistic or a national monopoly. The customers are mostly the national armed forces or other defence or security-based government organisations. The defence industry ownership is varied, such as privately owned as practiced in the United States, the UK, Australia, Japan; or state owned such as in Russia, China and India. The industry conduct deals with price and non-price competition. National procurement policy include preference for national equipment, the role of competition in procurement and the use of various forms of contract (e.g. cost-plus; fixed price and target cost incentives) (Hartley and Belin, 2020)

Why the need for a defence industry? Various scholars indicated that countries pursue defence industrialisation for both economic and non-economic reasons (political) reasons. These include in being the element of support to ensure a country's survival when facing security dilemma or military conflict (Bitzinger, 2013; Balakrishnan, 2008; Kinsella, 1998; and Brauer, 1998). Scholars also identified defence industrialisation as a strategic move of a country in providing support for the armed forces through the provision of weapons systems and military equipment; technological base for maintenance and development of military potential; and maintenance of weapons systems during their entire life-cycle, which implies the creation of self-defence reliance (Bitzinger, 2013; Balakrishnan, 2008 and Brauer, 1998). Having a competent industry also helps resolve the issue of security of supply, including on arms import uncertainty such as weapons embargoes or other threats to arms import supply (Bitzinger, 2013). A few countries such as India, Israel and North Korea have taken specific national dimensions where they have been willing to support their national industry for security and independence reasons regardless of costs (Hartley and Belin, 2020). Meanwhile, economic reasons for defence industrialisation include import-substitution policy (Bitzinger, 2013; Balakrishnan, 2008). In addition, high technology associated with defence industry is a way for a country to demonstrate its industrial and technological prowess, hence the stature and power of a country (Bitzinger, 2013). Defence industrialisation also strengthens the human capital element through the creation of more technologically-related professions like engineers, scientists and skilled technicians. Defence industry is believed to be able to lead the growth of industrialisation in general as it promotes backward linkages to support the industries leading to spillover benefits to other industries such as the manufacturing of electronics, automotive industry, oil & gas and logistics (Othman et al., 2019; Brauer, 1998). Defence industrialisation is also acknowledged as a catalyst for capacity-building that creates high-value added products, and as a platform that enhances technology transfer, encourages inward flow of FDIs; and encourages absorption of high-technology which eventually all these will create spin-offs that boost the economy in general (Balakrishnan, 2008).

However, observers have also argued that defence industrialisation is costly and if undertaken in a small market is usually hindered by the issue of the lack of economies of scale. The industry has high barriers to entry, especially in relation to technology transfer from military to civilian applications. Defence industry is also filled with secrecy, especially when it comes to its research and development (R&D) (Balakrishnan, 2008). In recent years, the challenges to the defence industry also include the rising unit cost in real terms for major arms producers due to the rise in costs of materials, labour, infrastructure and logistics (Hartley and Belin, 2020).

Countries develop their defence industry capability in stages. This means, different countries are at different level of defence industrial capability. Several early scholars in this field

have developed the defence industry technological ladder which is still being considered until today. These includes Wulf (1985); Krause (1992); as well as Ross (1988) in Kinsella (1998) that described the level of capability in terms of defence industry phases of arms production as follows: Repair, maintenance and overhaul of imported weapon systems; Assembly of imported arms; Production of simple weapons components under license; Production of a major portion of weapons systems under license; and Indigenous design and production of weapons system.

Krause (1992)'s model is more comprehensive where he highlighted the following activities that are involved in arms production, ranging from simple maintenance tasks on imported arms to completely independent R&D and production capabilities, as highlighted by in his Ladder of Arms Production Table as follows:

| <b>'THE LADDER OF ARMS PRODUCTION'</b> |   |
|--|---|
| 1                                      | Capability of performing simple maintenance   |
| 2                                      | Overhaul, refurbishment and rudimentary modification capabilities   |
| 3                                      | Assembly of imported components, simple licensed production   |
| 4                                      | Local production of components or raw materials   |
| 5                                      | Final assembly of less sophisticated weapons; some local component production                             |
| 6                                      | Co-production or complete licensed production of less sophisticated weapons                               |
| 7                                      | Limited R&D improvements to local license-produced arms   |
| 8                                      | Limited independent production of less sophisticated weapons; limited production of more advanced weapons |
| 9                                      | Independent R&D and production of less sophisticated weapons  |
| 10                                     | Independent R&D and production of advanced arms with foreign components                                   |
| 11                                     | Completely independent R&D and production   |

**Table 1: The Ladder of Arms Production**

*Source: Krause (1992a, p. 171) adapted from Brauer (1998)*

These models help countries determine where they are placed in the industrial technological ladder and what they should do to move up the value ladder. Obviously, not all countries follow the technological ladder rigidly as some do take shorter path to attaining higher capabilities. Malaysia, though not a major arms producer, has been following its own technological sophistication path to attain higher level of industrial capability.

## **Evolution of the Malaysian Defence Industry Sector**

The primary justification for wanting a defence industrial base in Malaysia had always anchored on acquiring some level of defence self-reliance, during peace time and war (Wan Salleh, 2019). Malaysia considers the defence industry as a strategic industry, which by definition means an "industry that a government considers to be very important for the country's economy or safety" (Cambridge, 2021). The Ministry of Defence (MINDEF) defines defence industry as activities that are related to the production and manufacturing of capital items consisting various platforms of land, air, sea, weapon systems and military solutions, components and spares as well

as those in relation to MRO; of which the activities are intended to meet the defence and security needs of the country (Wan Salleh, 2019). This definition is consistent with other literature that highlights defence industry as the industry that provides military and strategic assets and services for the consumption of the country's armed forces for the purpose of national defence and security (Taylor and Hayward, 1989; Banlaoi, 2009 in Torrenova, 2012). Defence industry is also known as the platform that enables the creation of high-technology employment, backward linkages to support the industrial base, and the obtainment of military technology, much akin to the literature in defence industrialisation (Bitzinger, 2013; Balakrishnan, 2008)

The development of the Malaysian defence industry started in the early 1970s when the country embarked on the setting up of a government owned ordnance factory. This was followed by the privatisation of depot facilities of the Royal Malaysian Air Force and the Royal Malaysian Navy in the 1980s and 1990s, respectively (Balakrishnan, 2008). The Industrial Master Plan in 1986 expanded the industrial sector significantly by promoting backward linkages that led to further expansion of other sectors within the economy, hence contributed to the development of a broad industrial base, which was deemed necessary for the development of defence industry (Bitzinger, 2013; Balakrishnan, 2008). The heavy focus on civil industrialisation encouraged some companies that were engaged in the production of commercial goods to venture into the defence sector (Balakrishnan, 2008). The industry continued to receive further impetus with the nation's procurement of capital equipment in the 1990s and the implementation of offset policy that had enabled the industry as well as the country to leverage on the procurement process to acquire high end technology, especially in defence (Balakrishnan & Matthews, 2009 in Sulaiman et. al., 2020).

### **Malaysian Defence Industry Capability**

In the current climate, the defence industry had intensified with industrial capability spanning into the security and dual-use technology sectors. The Malaysia Industry Council for Defence, Enforcement and Security (MIDES), previously known as Malaysian Defence Industry Council (MDIC) which was set up in 1999, is the main collaborative platform sector for the Malaysian defence industry. According to MIDES, the total number of defence industry players registered as members (as of January 2021) is 70, covering six main sectors namely Aerospace, Maritime, Weapons, Automotive, ICT and Common User Items. MIDES, which consists of senior level membership ranging from the MAF, MINDEF, Ministry of Finance and all of the defence industry as well as other defence and related agencies is a very formidable grouping that influences key policy decisions on the growth and development of this sector ([mides.mod.gov.my](http://mides.mod.gov.my)). The industry players now undertake a much larger spectrum of activities including specialised MRO activities; small calibre ammunitions, aerial reconnaissance vehicles (ARV), building of patrol vessels, a larger communication and ICT operations, military gear and apparels (Defence Industry Division, 2021). A few of these companies have also managed to penetrate into the global market by becoming the supply chain of various global defence primes (Wan Salleh, 2019).

Malaysia's phases of arms production relates to Bitzinger's classification of a country's defence industry. In this context, Sulaiman et. al. (2020) pointed out Bitzinger's view that Malaysia is identified as the 'third-tier' arms producing country where its defence industry is only capable of producing arms which is relatively 'low tech' and can only produce small arms, ammunitions, armoured vehicles and small sized ships including small arms licensed production such as rifles, and putting together imported parts for specific military equipment such as helicopters and armoured vehicles (Sulaiman, et al., 2020).

In the same context, the Malaysian defence industry sector development could be categorised as at level six based on Krause's ladder of arm's production. This refers to the ability to co-produce or undertake licensed production of less sophisticated weapons as it continues to contribute to a growing supply of various types of services and activities, as shown on the following Table 2, including:

| Sector    | Current Capabilities  |
|-----------|---|
| Weapon    | <p>Manufacturing and supplies of small arms and ammunition (snipers, rifles, etc) and artillery (light machine guns, mortars, automated grenade launchers, remote controlled weapon systems, air defence systems, rocket launchers, missiles etc.) Semiautomatic pistol, Steyr AUG</p> <p>Medium calibre ammunition, cartridges and refurbishment of old ammunition and bombs</p> <p>Supply of Colt M4 Carbine</p> <p>Maintenance, repair, modification and upgrade of various types of guns</p> <p>Testing &amp; evaluation</p>  |
| Aerospace | <p>Aircrafts, helicopters, Unmanned aerial vehicles (UAVs)</p> <p>Space equipments</p> <p>Maintenance, Repair and Overhaul</p> <p>Composite and metal parts manufacturing</p> <p>Avionic System</p> <p>Flight simulator and computer based training</p> <p>Radar and satellite technology</p> <p>Air-to-air refuelling</p>  |
| ICT       | <p>Electronic equipment (reconnaissance, command &amp; control)</p> <p>Flight Simulators</p> <p>Visual Systems</p> <p>Anti-Drone Systems</p> <p>Air Defence Systems</p> <p>Air Traffic Systems</p> <p>Unmanned Aerial Systems</p> <p>Command &amp; Control Suite</p> <p>Radar Systems</p> <p>Surveillance system</p> <p>System Integration</p> <p>Radar Communication</p> <p>Electronic Warfare and Surveillance System</p> <p>Secured Radio Network</p> <p>IT Solution, Telecommunication</p> <p>Manufacturing and R&amp;D of indigenous system and hardware technology</p> <p>Supply and servicing of military radar, communication and electronic equipment and system</p> |



| Sector            | Current Capabilities  |
|-------------------|---|
| Maritime          | <p>Naval vessels and warships (including battleships, vessels, amphibious assault ships, command and control ships, cruisers, destroyers, frigates, carriers, submarines, aircraft carriers, minesweepers, operational support and military sea lift ships)</p> <p>New Generation Patrol Vessels (NGPV)</p> <p>Fast Troop Vessel</p> <p>Various types of patrol crafts and strike craft</p> <p>Training ship</p>  |
| Automotive        | <p>Military vehicles (including command vehicles, main battle tanks (MBT), armoured fighting vehicles (AFV), infantry fighting vehicles (IFV), assault bridges and engineering vehicle)</p> <p>Armoured vehicles AV8, AV4</p> <p>Trucks</p> <p>Support Vehicle</p> <p>Design</p> <p>Manufacture</p> <p>Maintenance, Repair and Overhaul</p> <p>System Integration</p> <p>Assembly</p>   |
| Common User Items | <p>Services (maintenance, support, training, logistics, transport, camouflage paint)</p> <p>Packed Rations</p> <p>Equipment (Personal Integrated Protection System, Parachute)</p> <p>Buildings</p> <p>Infrastructure Personal Load Carrying Equipment – rucksacks, assault vest, chest rigs, ammunition pouches, belt, large and small packs, etc.</p> <p>Clothing – camouflage and official uniforms, fire retardant coveralls, weather resistance apparel protective clothing and special operations suits, combat clothing</p> <p>Survival equipment – overheat sheet cover, hammock bet, oneman tent</p> <p>Manufacturing and supplies of military shoes</p> <p>Various types of parachute</p> |

**Table 2: Malaysian Defence Industry Capability**  
*Source: Defence Industry Division (2021); MIGHT (2021)*

Further, it should be noted that the structure and ownership of the MDI is unique whereby many of them were a spun-off from the civil sector. These companies are mostly private, agile and adaptable. They form a subsidiary for defence business within their overall business. These companies such as Sapura, DRB HICOM, WESTSTAR, NADI Group mainly cater to the domestic market, specialise in in dual-use technology sectors which provides for economies of scale and scope.

## **THE ROLE OF THE STATE IN PROMOTING THE MALAYSIAN DEFENCE INDUSTRY**

The Malaysian government and the MAF take an active role in supporting and promoting the growth of the Malaysian defence industry. There is strong engagement and consultation with the industry in creating action-plans that could alleviate the growth of this sector. The government-industry collaboration becomes vital to ensure some level of defence industrial capability is retained in country. There is an awareness to ensure local content and in-country value-added instead of procuring all of the equipment and services off-the-shelf from overseas. The government understands that state intervention is required to maintain strategic industries, especially in small countries with limited resources, like Malaysia. There is an expectation that the defence industry sector will also contribute to economic development, though it has been hard in the case of Malaysia to clearly demonstrate the economic value from defence. Several initiatives have been taken to prop up the Malaysian defence industry sector in the past.

### **Defence Industry Blueprint (DIB)**

The first Defence Industry Blueprint was published in 2004 by MINDEF as a strategic document that highlighted the significant contribution of the industry to national defence capability as well as act as a guide for the industry in line with the current development during that time. The emphasis of the Blueprint among others covered capability development levels, new approaches to the offset programme and technology transfer, new approaches to defence acquisition and industry incentives. The DIB also emphasised the role of government agencies and other stakeholders including MDIC, universities and research institutions. There were various attempts to review the 2004 DIB document to equip the industry with more up-to-date plans in line with increasing security concerns, especially as the country faces new non-traditional threats. The current leadership of the Ministry of Defence, namely the Minister of Defence; the Secretary General; and the Chief of Defence Forces had clearly stated the need to prepare the defence and security industry and the need for greater collaboration between relevant stakeholders to meet the requirements of the MAF (Yaakob, 2021; Abdul Aziz, 2021; Buang, 2021). For this purpose, MINDEF has tasked the Malaysian Industry-Government Group for High Technology (MIGHT) to draw up the Defence Industry Policy in 2020. The Minister of Defence highlighted that the document, when published, should set a medium to long-term strategy and growth plan for the Malaysian defence industry to position Malaysia as producer of military platforms, with the aim to reduce reliance on imports and spur the national economy (Grevatt, 2021). The key to the success of the DIB will be the extent to which the stakeholders are willing to adopt and implement the details ingrained in the blue-print.

### **Defence White Paper Chapter Seven**

Similarly, the Defence White Paper (DWP), chapter seven, highlights the strategic intention and focus of the Government in developing defence industry. The chapter focusses on aspects of defence science, technology and industry, stressing on the importance of the Malaysian defence industry to support military capability and at the same time as a catalyst for economic growth. The DWP also emphasises the need for R&D investment, synergising industrial and inter-agency resilience, as well as strengthening of overall defence capabilities. The DWP reflects the Government's commitment in formulating a new National Defence and Security Industry Policy (NDIP) that will serve as the latest guideline for the development of this sector, in line with the current times and taking into cognizance the country's challenges (MINDEF, 2020). The question is whether the successive governments will have the same level of energy and appetite to implement the policy.

## **International Defence Relations**

Other development mechanism includes the creation of international bilateral defence relations with various countries around the world, leveraging on defence industrial cooperation platform. Malaysia has active bilateral relations with more than ten countries where it engages in defence science, technology and industry discussions. Discussions with other countries are mainly done through Defence Industry Working Group platform with counterparts from around the globe, including countries like the United Kingdom, France, Italy, Sweden, US, China, Russia, Japan. These discussions include to share information on the MDI capabilities structures and interests for partnerships; to explore new collaboration including in research and development (R&D), training and education; and to engage in policy and implementation of offsets programs; and to promote MDI through participation at International defence and security exhibitions. Malaysia has had an advantage of being able to work with various international partners in building its niche industrial capability. However, the more liberal and non-aligned stance may also restrict the extent to which foreign partners and OEMs will be willing to share key-technologies. At the multilateral level, Malaysia has also been at the forefront of forging defence cooperation with members of South East Asian (SEA) countries by initiating and formalising the formation of the ASEAN Defence Industrial collaboration working group (ADIC) as part of the ASEAN Defence Minister's Meeting (ADMM). The key objective of ADIC is to create inter-ASEAN defence industry collaboration and to reduce net imports. However, the progress of ADIC has been disappointing and has not had the right level of buy-in or synergy amongst its members nor sufficient resources has been allocated to make the platform more meaningful (Balakrishnan and Bitzinger, 2012; Balakrishnan and Matthews, 2009). There are however on-going discussions on how to re-vitalise ADIC and the extent of external support from major defence exporters for co-development and joint-production.

## **Defence Procurement and Offsets**

There is also a strong desire for the participation of local defence industry companies both prime and SMEs in major procurement (MINDEF, 2020). Local companies have been awarded long term contracts which are vital to ensure that the companies will be committed to invest. In the past, major Malaysian companies were even awarded main contract programmes with OEMs as sub-contractors such as the Littoral Combat Ship and Armoured Vehicles programmes. These policy decisions were taken by the government to provide opportunities to Malaysian companies to take up leadership for the whole programme management of the procurement, to create local capabilities and take lead responsibility in delivering the programme. Some however felt that local defence companies were not sufficiently equipped to lead such mega-projects that require in-depth knowledge and complex project management skills (Azhar, 2020; Abas, 2011). The Malaysian defence procurement process is being constantly evaluated to deliver better value. Offset is another policy tool used for defence industry development in Malaysia. Offset is one of the options under the Industrial Collaboration Program platform (ICP) in Malaysia that relates very closely to the procurement of strategic assets (Ministry of Finance, 2018). In brief, offset implies the arrangement between a government and a foreign arms supplier to direct benefits of the defence procurement made back into the purchasing country as a condition of sale (Balakrishnan, 2018). In Malaysia, offset is a significant policy tool used to leverage in procurement to achieve country's aspiration of a sustainable high-end industrial & tech-based country (Balakrishnan and Matthews, 2009). Offsets are used as economic development tool that enables faster transfer of technology and transfer of knowledge that has ripple effects to the economy (Defence Industry Division, 2020). There is obviously continuous review and debate over the effectiveness of offsets as an effective tool to build Malaysia's defence and dual-use defence and security industry sector. The scrutiny over the delivery of offsets is positive if Malaysia wants to maximise offsets for industrial and technological development.

## **ROLE OF THE MALAYSIA INDUSTRY COUNCIL FOR DEFENCE, ENFORCEMENT AND SECURITY (MIDES) AND OTHER AGENCIES**

The Malaysia Industry Council for Defence, Enforcement and Security (MIDES) is a platform that was established post restructuring exercise of Malaysian Defence Industrial Council (MDIC). MIDES was established to navigate policies to support the MDI, coordinate development of the defence industry, facilitate capability development and address issues and challenges facing the industry. However, the council is often criticised for lack coordination and agreement between the stakeholders; more of a ‘talk-shop’ and have had limited impact on the development of the MDI. MDIC, which initially was confined to only the defence sector, was restructured in 2010 to become MIDES, of which the participation and involvement then included the enforcement and security related agencies in Malaysia. The intention to extend the membership of the Council at that time was mainly to acknowledge that the defence sector needed to incorporate the security sector which included other governmental agencies. The Chairman of MIDES is the Minister of Defence and membership comprises of government agencies such as the Ministry of Defence, Economic Planning Unit, Prime Minister’s Department, Ministry of International Trade and Industry, Ministry of Finance, Ministry of Entrepreneur and Cooperative Development, Ministry of Home Affairs, the Malaysian Industry-Government Group for High Technology (MIGHT); and members of the MDI. Despite the various policy initiatives and industry involvement, Malaysia’s MDI capability is still claimed to be limited compared to its neighbouring countries. Various challenges still exist for accelerating the pace of growth for defence industry. The next section discusses the challenges facing the Malaysia defence industry.

## **WHAT ARE THE CHALLENGES LIMITING THE GROWTH OF THE MALAYSIAN DEFENCE INDUSTRY?**

Malaysia has acquired limited technological capability in pure defence technology but considerably better achievement in dual-use technology sectors. However, this achievement is still below average compared to the industrial capability achievement of some of the neighbouring countries. Several stakeholders including from the Malaysian Armed Forces, Ministry of Defence Malaysia, MINDEF and other related organisations, claim that the industry continues to be filled with huge challenges that continue to exist, and the failure to resolve these issues could be considered as the main reason why the industry is still stuck in a growth rut. What are these challenges?

### **Lack of Strategic Approach in Procurement of Defence Assets**

Almost all countries, with the exception of a few countries like the United States, import their strategic defence assets. Therefore, high dependence on import is associated with the lack of strategic decision making on procurement programs and activities in the Malaysian case. The MAF has developed capability planning documents on strategic assets requirement as part of the 4DMAF programme, namely Army4NextGen by the Army; 15-to-5 by the Navy; and CAP55 by the Airforce (MINDEF 2020; Daud, 2017 in Sulaiman et al., 2020). Despite the existence of these documents, many of the procurement activities over the past few years had still been on ad-hoc basis, with minimal industry input to local industrial involvement. Ad hoc, underfinanced defence projects undertaken by hodgepodge of companies that emphasise immediate economic returns are some of the example that reflect the lack of strategic focus given on this supposedly “strategic industry” (Interviewee A, 2020; Bitzinger, 2013; Balakrishnan, 2008). Overtime, this issue seems

to persist. Therefore, the question remains as to what is the appropriate balance between local production and import (Interviewee A, 2020). The stakeholders must assess and determine the MDI's capability and capacity to develop and maintain products locally (Interviewee A, 2020). A more strategic procurement approach would mean that assets are bought on the planned needs of the MAF where local content and MDI involvement is pre-determined during the initial procurement stage. This means that the MDI is better prepared to support the strategic assets in terms of assets, spares and MROs. For this to happen, the end users and other stakeholders must trust and have confidence in the capability of the local companies to be able to perform to high standards. In the past, there had been major issues with lack of local industry performance and quality of delivery on programmes. This implies that the MDI must demonstrate their ability to perform and undertake risks together with the foreign contractors.

### **Limited Local Industrial Technological Absorptive Capability**

Malaysia has spent more than RM40 billion on procurement of strategic assets as well as in upgrading of old ones in the past 15 years (2006 – 2020) under the 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> Malaysia Plans (MINDEFa, 2019). This means, huge amount has been spent in modernising the MAF and advancing the nation's military technology in line with the development of global military technology. These military investments should have enabled the country in general and the industry in particular to obtain abundance of new and advanced military technology, namely through transfer of technology; transfer of knowledge as well as opportunities in getting the local industry players to become part of the global supply chain through the implementation of offset and industrial collaboration programs.

However, the success of transfer of technology and turning the industry players to become part of the international supply chain is found to be rather limited. More than 90% of Malaysia's strategic assets are still imported from overseas (MINDEFb, 2019; Wan Salleh, 2019) as shown on Table 3. There is very high dependence on imports and this is not balanced by any exports which reflects a defence industrial base that is comparatively small in size; and one that is limited in capability to produce products or services that are suitable for domestic use and export purposes. This points to the issue of limited capability among the local defence industry players and their lack of technological absorption capacity (Bitzinger, 2013). MDI's lack of capacity and limited production capability is also demonstrated as the country continues to remain at tier three level in the international arms market stratification (Bitzinger, 2012), overtaken by countries that had the same entry point as Malaysia in terms of defence industrialisation such as Singapore, Indonesia and South Korea. Only a few local companies such as CTRM, UMW, Contraves and STE have managed to penetrate into the global supply chain for large defence primes (Defence Industry Division, 2020; Wan Salleh, 2019). The inability to increase local capability is blamed on the lack of in-country technological absorptive capability.

| Dependence on Imported Assets     |           |                                     |           |
|-----------------------------------|-----------|-------------------------------------|-----------|
| Fleets and Ships                  |           | Armoured Vehicles                   | Aircrafts |
| Model                             | Countries | Model                               | Countries |
| FRIGATE 23                        |           | PT-91                               |           |
| CORVETTE 22                       |           | FV101 Scorpion                      |           |
| LCS 25                            |           | ACV 300                             |           |
| NGPV 17                           |           | K-200 KIFV                          |           |
| LAKSAMANA24                       |           | Alvis Stormer                       |           |
| FAC 1                             |           | Bandvaan 206                        |           |
| FAC 2                             |           | AV-8 Gempita (8x8)                  |           |
| FAC (G)                           |           | Sibmas (6x6)                        |           |
| PC                                |           | Condor (4x4)                        |           |
| MPSS 31                           |           | AV-4 Lipanbara (4x4)                |           |
| AUXILIARY/ MISC                   |           | ASV Guardian (4x4)                  |           |
| MCM 28                            |           | Ferret (4x4)                        |           |
| HYDROGRAPHIC 36                   |           | URO Vantac                          |           |
| TRAINING SHIP 21                  |           | Weststar Defence GK-M1              |           |
| SUBMARINE                         |           | Mercedes-Benz G-Class               |           |
| Estimated through statistics      |           | 90% dependence on imported products |           |
| System                            |           | Aircrafts                           |           |
| Model                             | Countries | Model                               | Countries |
| Radio Taktikal (Rohde & Schwarz)  |           | Combat Aircraft                     |           |
| Cyber Defence Sys (Bae System)    |           | BAE Hawk                            |           |
| Radio Taktikal (Rockwell Collins) |           | Sukhoi Su-30                        |           |
| Radio Taktikal (Harris)           |           | Boeing F/A-18                       |           |
| Radio Taktikal (Thales Group)     |           | Maritime Patrol                     |           |
| Navigasi (Northrop Grumman)       |           | Super King Air                      |           |
| TRC 5100 (Sapura Thales)          |           | Tanker                              |           |
| Sensors (General Dynamics)        |           | KC-130 Hercules                     |           |
| Navigasi (Raytheon)               |           | Transport                           |           |
|                                   |           | CASACN-235                          |           |
|                                   |           | Airbus A400M                        |           |
|                                   |           | C-130 Hercules                      |           |
|                                   |           | Helicopters                         |           |
|                                   |           | Sikorsky S-70                       |           |
|                                   |           | Sikorsky S-61                       |           |
|                                   |           | Eurocopter EC 725                   |           |
|                                   |           | Trainer Aircraft                    |           |
|                                   |           | BAE Hawk                            |           |
|                                   |           | Aermacchi MB-339                    |           |
|                                   |           | Super King Air                      |           |
|                                   |           | Pilatus PC-7                        |           |
|                                   |           | Eurocopter EC120                    |           |
|                                   |           | UAV                                 |           |
|                                   |           | CTRM Aludra                         |           |
|                                   |           | ScanEagle                           |           |
|                                   |           | Eagle 150                           |           |

Table 3: Malaysia's Dependence on Imported Assets

Source: MINDEFb (2019); Wan Salleh (2019)

How can the local industrial capability be enhanced? This is a hard question and requires long term strategic planning, focus and targeted sectoral approach. The challenge for the industry is to combine exogenous and endogenous technological absorption approach that allows for sustainable long term industrial capability building. Further, the industry should focus on niche defence and dual-use technology sectors based on available resources that may deliver better value. For example, major OEMs are dependent on Taiwan, a small country that had mastered the manufacturing of critical technology component such as microchip processing and printed circuit board. A good example in the context of Malaysia is the maintenance, repair and overhaul (MRO) sector. Throughout these years, it is claimed that Malaysia has built niche capability in the MRO sector, where several defence companies have engaged in MRO activities. Therefore, there should be further consideration for the development of this sector by building world class capability on MRO (Interviewee A, 2020), with the aim that OEMs operating in the region could be using Malaysia as the regional hub for MRO activities of specific assets or equipment. However, the problem reverts to the lack of strategic focus, and bizarre procurement decisions that negates economies of scale, further exacerbated by the lack of commitment to investment in infrastructure and human resources by stakeholders.

### Lack of Strategic Fit Between Local and Foreign Partners

The Malaysian defence industrial base is still heavily dependent on foreign contractors and OEMs on matters related to defence assets in Malaysia. The MDI understands that industrial collaboration with OEMs is vital to build its own industrial base (Interviewee B, 2018; Interviewee C, 2020). The partnership is based on the realisation that the OEMs have the technological prowess and resources and the local companies have access to the market and stakeholders. However, in reality there is sometimes a misalignment when there is lack of strategic fit within the collaborative partnership between the local and foreign partners. At times, the local companies are overshadowed by their foreign partners that are more able financially; and technologically more adept and experienced in its defence ecosystem. This makes it hard for the local defence industry players to collaborate with them. At the same time, wrong choice of local partner could create a



lack of strategic fit between the local defence industry players and their OEMs partners. The OEM then ends up having to work with a local partner that is unable to deliver for them. Realising this issue, it is important that collaborative partners for defence procurement programs to be chosen based on strategic fit and the right level of capability. The lack of strategic fit between local and overseas partners had ended up in severe challenges facing the completion of procurement programs with high cost implication to the MAF and the industry. Directed partnership as opposed to one determined by market based on strategic fit and efficiency can become very costly and less productive for all parties.

### **Lack of Defence R&D Spending Leading to Innovation**

Another major issue is the limited capability to innovate within the Malaysian defence industry sector. Various reasons have been identified to the lack of innovation. First, is the lack of allocation of R&D funding. This was mentioned time and again during the interview sessions undertaken with the industry stakeholders. The low budget allocated to STRIDE for defence R&D, which is Malaysia's defence research organisation, in particular was repeatedly highlighted in documents analysis and interviews with stakeholders (Interviewee C, 2020; Interviewee D, 2019; STRIDE, 2016). STRIDE was originally established as Defence Science Technology Centre (DSTC) within MINDEF. Understanding the importance of defence technology and research and development (R&D) in developing the defence industry, the government, in 1968, set up the DSTC with the main task of supplying scientific and technologic expertise to the MAF (STRIDE, 2016; Balakrishnan, 2008). DSTC was then renamed to STRIDE in 2001 and the agency continues to undertake various R&D and innovation related activities in defence including R&D, testing and commercialisation. Table 4 illustrates the Development Budget for STRIDE for the past 15 years. The budget allocation is meagre, in contrast to STRIDE's role as the as the only agency that is responsible for all things related to defence R&D and technology in Malaysia. Although the budget is on the increasing trend but this is questionable taking into account the impact of COVID 19 that may affect government budget allocation for defence R&D. At the same time, there is also the issue of investments into building the right capacity of research skills to undertake R&D programmes. In addition, there is the question of how many STRIDE and defence industry officials are being trained, exposed to R&D environment and being incentivised to undertake R&D? How is the R&D eco-system being rewarded for successful innovation outcome?

The low level of investment into defence R&D is also reflected by the lack of success when it comes to the implementation of defence R&D, whereby at STRIDE level, there were only several project output that was listed as commercialised R&D products such as: Meat Bars; Water Hydration Backpack; Soft Body Armor Vest; Aerostat and Airship Based Surveillance System; and Unmanned Surface Vessel (STRIDE, 2016). In addition, the issue on the lack of defence R&D is further compounded by the fact that R&D is considered as high risk activities that require a huge level of investment with a long gestation period in getting the return on investment. Hence, majority of local defence companies are found to be hesitant in investing and taking the risk to invest without the guarantee form the government in buying or procuring their R&D output (MINDEF, 2020).

| Malaysia Plan                  | Development Budget for STRIDE |
|--------------------------------|-------------------------------|
| 8th Malaysia Plan 2005 - 2010  | RM2.2 million                 |
| 9th Malaysia Plan 2006 - 2010  | RM17.5 million                |
| 10th Malaysia Plan 2011 - 2015 | RM10 million                  |
| 11th Malaysia Plan 2016 - 2020 | RM92.2 million                |

**Table 4: STRIDE Development Budget 8MP; 9MP; 10MP; 11MP**

*Source: STRIDE (2020)*

## THE FUTURE OF THE MALAYSIAN DEFENCE INDUSTRY?

Is the Malaysian defence industry at a cross road? After almost 50 years, the Malaysian defence industry growth is still considered modest. The industry has developed some level of design, manufacturing, sub-assemblies and through life support capabilities (MINDEF, 2020). Nonetheless, the industry still faces various challenges relating to lack of strategic fit and focus when it comes to collaborative industrial programs; limited technological absorptive capability; and lack of allocation from defence spending for R&D. Therefore, the question now is what does the future hold for Malaysian defence industry, in particular, based on the initiatives listed in the 2020 DWP?

First, on the issue of the lack of strategic approach in procurement of defence assets, the DWP reflects continuous effort to enhance the governance process and especially the interaction between the MAF, MINDEF and the MDI. For example, there is greater appetite to get the various stakeholders involved in capability planning from the outset. This is related to the intended focus on simplifying the procurement process using a more transparent mechanism known as the Defence Investment Committee (DIC). It is claimed that the DIC will cut down unnecessary layers of bureaucratic processes by introducing transparent mechanisms for defence procurement and support. The DWP is also focused in encouraging defence players to develop multi-user products to meet the needs of various stakeholders within the defence and security sector including the military, other government agencies and the commercial sectors' vehicles, ships and boats, computer hardware and software, electronics equipments and communications systems (MINDEF, 2020). This strategy is certainly seen as a way forward to creating economies of scale, ensures lower production costs for defence companies and better returns on investments for economic activities. Further, the DWP emphasis a focus on the development of dual-use technologies based on available resources which is again said to deliver better value for money for companies.

Second, on the issue of limited capability, the DWP had emphasised the need for the MDI sector to embrace IR 4.0 technologies and maximise automation to meet new assets requirement by the MAF. To maximize the benefits of IR 4.0, Malaysian defence companies should make the most of this initiative by taking the chance to work with various commercial companies and gain the advantage of embracing and obtaining technology through open innovation platforms. At the same time, the MAF capability planning and procurement programmes should consider what is available in the digital space and newer technologies where the commercial sector companies have much greater technological absorptive capability and leading innovative techniques. The MAF, MINDEF and the MDI should cast more widely to incorporate start-ups and SME companies with cutting-edge technology capabilities into their network.

Third, in relation to the lack of defence spending on R&D, the DWP also spells out Government that the government is committed to allocate 10% -15% of the total nominal offset value of the Industrial Collaboration Program (ICP) for R&D purposes. The primary objective of this policy is to further develop Malaysia's defence R&D capability. Nevertheless, the impact from this policy will be greater if the R&D allocation is strategically used to develop relevant industrial capability and for long term human capital development based on a clear technology roadmap. The MDI should also consider furthering R&D investments in their companies and not to be solely dependent on government funding. In Malaysia, there has been a tendency of the MDIs to not focus on R&D as it is considered risky, the returns are minimal and that it may take a long time to harvest the returns on investments. This attitude has to change if the MDI wants to grow and be a significant innovator in the Malaysian industrial landscape. In the context of defence and dual-use sectors, government funding becomes essential for R&D based industry-academia collaboration at national and international level to drive long-term partnerships in the local scene but also with international partners. Fourth, in facing the issue of the lack of strategic fit, a more 'laissez-faire' approach to how OEMs choose local partners would also resolve the issue of the lack of strategic fit between local and foreign players. At the same time, the industrial partnership should be complimentary and organic based on mutual interest rather than being enforced. Government intervention should only be limited to monitoring the progress, deliverables and any related disputes between the partners confined to the offsets based programmes.

## CONCLUSION

The Malaysian defence industry sector continues to thrive despite the various challenges including lack of strategic approach in procurement of defence assets; limited local industrial technological absorptive capability; lack of strategic fit between local and foreign partners; and lack of defence R&D spending leading to innovation. The DWP 2020 and the renewed Defence Industry Policy 2021 sets a new agenda for the development and growth of this sector. There is a positive aspiration to move in the right direction to transform military capability planning and procurement process, enhance industrial absorptive capability through greater investment in R&D and improvise industrial partnerships and choice of partners. At the same time, the transformation of the Malaysian Armed Forces as they embrace new technologies and respond to new threats will require new types of equipment, skills and infrastructure for the new roles. This means there is pressing need for additional defence spending to cope with these new developments. COVID 19 has had a huge impact on most nations national budget and re-distribution of allocation of funding to other sectors especially healthcare. Does this mean that other sectors such as defence will be totally neglected? If that is the case, there is a danger for industrial sectors such as the defence industry to be sufficiently funded and supported. Considering the increased security threat in the region and vulnerability to Malaysia's borders, territorial waters and resources, the country has to continue to think innovatively on how to continue to build its defence industrial base despite the limited available resources.

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## COVID-19 PANDEMIC: WHAT FUTURE HOLDS FOR BIO-TERRORISM THREATS

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### ABSTRACT

*Bio-terrorism is a threat of using biological agents by individuals or groups motivated by religious, political or other ideological objectives. Terrorist networks are attracted to biological weapons due to the pathogens that could cause mass casualties and harmful to human beings on an unprecedented scale. On this backdrop, this essay tries to discuss the potential threat of bio-terrorism and how it affects the recent developments related to the COVID-19 pandemic. Simultaneously, this essay examines the future potential threats by terrorist networks in conducting bio-attacks to achieve their goal, assessing their capabilities and our vulnerabilities in our surveillance to avoid any risk that caused by bio-attack. The emergence of the COVID-19 pandemic has given an inspiration for terrorist to develop bio-weapon agents to inflict fear in the society along with rapid terrorist activities which remain prevalent and imminent. In light of the possible threat, it is necessary for us to start from the beginning by taking precautionary measures to avoid any potential threat related to bio-attack. These includes monitoring terrorism situation and terrorist activities, evaluate threat of this bio-attack in order to response when bio-terrorism attack occurs.*

**Keywords:** *Bio-Terrorism, Terrorist, Globalisation, Violence, Bio-Weapon, Ransom, Threats.*

### INTRODUCTION

About 25 years ago, we have had witnessed one of the infamous bio-terror attacks by the Aum Shinrikyo, a Japanese cult movement who conducted a Sarin gas attack on the Tokyo Subway, Japan on 20 March 1995 which killed 12 civilians. At the time, our major concerns for security were nuclear from state sponsored full-scale nuclear warfare. Bio-terrorism or any infectious agents might not be in the picture and terrorism was something related and limited to plane hijacking, hostage taking, firearms smuggling and bombing attacks. Today, the threat of terrorism has evolved into broad spectrum of threats from arms and weapons to chemical, explosive, radiologic and biologic. As far as we are concerned, we are facing with a devastating event due to biological terrorism and the development of a pandemic due to mother nature. The novel Coronavirus which appeared at the end of 2019 has brought a new world concern due to its widely spread of COVID-19 virus more than SARS and MERS had done years ago.



**Figure 1 : Aum Shinrikyo, Sarin Gas Attacks, Tokyo Subway**

## TERRORISM AND BIO-TERRORISM; DIMENSION AND THE CONNECTION

The meaning of terrorism has changed over time to accommodate the political vernacular, policy of countries and current situations. This also means there is no specific definition of terrorism. However, terrorism is always defined as a tool or method being used by non-state actors particularly terrorist to inculcate fear and create panic in the public. Similarly, it has also projected the threat of violence, a system of coercive intimidation, used and directed in pursuit of, or in service of a political aim. In a simple perspective, the concept of terrorism has been divided into three main criteria; the use of violent or threat to use violent, its targeting civilians or non-legitimate targets and the third components are the act of violence is driven by political and religious motivation.

In the 21<sup>st</sup> century, we have seen terrorism issues are interlinked with violent incidents conducted by religious terrorist organisations such as *Daesh @ Islamic State in Syria and Iraq (ISIS)*, *Al Qaeda*, *Al Shabaab* as well as ethno-nationalist groups or separatist movements like *Kurdistan Worker's Party (PKK)*, *Arakan Army* in Myanmar, *New People's Army (NPA)* in the Southern Philippines, and *Balochistan Liberation Army (BLA)* in Pakistan. There were 648 terrorist groups that had been existed between 1968 to 2006. Beyond that, more than 20 new groups have emerged and been active until now. Moreover, terrorists are deliberately cloak themselves in the terminology of military jargon by portraying themselves as *bona fide* (freedom fighters), if not soldiers, are entitled to treatment as Prisoners of War (POW) if captured to avoid being prosecuted as common criminals in ordinary courts of law.



Figure 2: Surabaya Church Bombings



Figure 3: The Murder of a Jordanian Pilot by Daesh in Syria

The factor of globalisation has been one of the contributing aspects that drive terrorism possible in this modern era. Globalisation has made the borders almost non-existent with security checks at airports and border checkpoints are relaxed to hasten the flow of products and raw materials, banking rules have been relaxed to assist the flow of investments, travel around the globe has become easier and cultures have mixed making it difficult to identify a stranger from a friend. Terrorism has become one of the main peace and security challenges experienced by countries worldwide. Terrorist groups have vehemently used violence as their last resort to achieve political goals by intimidating society with their notorious activities include kidnapping for ransom, extortion and killing indiscriminately. What differ terrorist groups from criminals is a basic component of ideology that serves as motivation for terror acts. As the years go by, the threats and issues pertaining to this matter become more complex.

Bio-terrorism, by definition, is assumed to involve the threat or use of biological agents by individuals or groups motivated by religious, political or other ideological objectives. These agents comprising bacteria, viruses, fungi or toxins and may be in a naturally occurring or a human-modified form in much the same way in biological warfare. Just like terrorism, there is not commonly accepted definition of bio-terrorism but to relate it to the type of method being used in the terrorist attacks. Biological weapons come under the category of Weapons of Mass Destruction (WMD) which can be divided into chemical, biological, radiological, and nuclear (CBRN) elements whereas dirty bomb which is a type of radiological dispersal device combines a conventional explosive such as dynamite with radioactive material. It is different than nuclear bomb in terms of its impact where dirty bomb's radiation could be dispersed within a few blocks or miles of the explosion.



**Figure 4: Illustration of Bio-Terrorism**

Studies has shown that there are six pathogens classified as Category A threats: *anthrax*, *smallpox*, *ebola*, *Francisella Tularensis*, *Yersinia Pestis*, *Clostridium Botulinum*. These agents are easily disseminated and highly infectious which can lead to high mortality rates. Meanwhile, **Category B** agents such as *V. Cholerae*, *Salmonella* and *Encephalitis*. Category B agents is considered lower in priority because of their lower mortality rates and the ease with which can be treated. **Category C** is *Hanta-Virus* which is an emerging pathogens considered to have a potential for weaponisation due to their high morbidity and availability. New category of viruses such as SARS (Severe Acute Respiratory Syndrome) and MERS (Middle East Respiratory Syndrome) are infectious respiratory diseases that are caused by members of viruses known as coronaviruses. The name coronavirus comes from appearance of the virus under the microscope, it has a spiky or crown-like (corona) appearance. Terrorist has desired and get inspired to possess such agents for their future terror plans to inflict more mortalities especially in targeting civilians and security forces due to the impact of the deadly viruses on human beings.

## Why Terror Groups Attracted to Biological Weapons?

We notice that the core of terrorism is the ability to terrorise and one of the elements in defining terrorism act is they are targeting the civilians. There are four significant factors on why bio-terrorism may favour terrorist organisation. First, terrorist networks are attracted to biological weapons because the pathogens could cause mass casualties and harmful to human beings on an unprecedented scale. Second terrorist networks are attracted to unique features of bioterrorism that have nothing to do with intended psychological impact of biological weapon use. It means they used biological agents as a tool to achieve goals. Third, bio-attack can increase terrorist capabilities in the aspect of modus operandi especially for the 21st century terrorist organisations such as Daesh, Al Qaeda and the far-right groups due to its impacts on society and public safety. Fourth, bio-terrorism, even though the attacks are relatively small, somehow, it can result into high impacts. This means an effective terrorist knows how to plan his acts of terrorism for maximum impacts.

## History of Terror Groups Using Biological Agents

Modern-day bio-terrorism was found in the 70's by the leftist groups and right-wing groups in the Western countries. Up to now, non-state actors have not given up in producing the bioweapons to achieve their objectives. Other attempts are including: In 1972, members of right-wing group known as *Order of the Rising Sun* were found in possession of 30 - 40 kilograms of typhoid bacteria cultures that were allegedly to be used to contaminate the water supplies of several mid-western cities. In 1975, the *Symbionese Liberation Army* was found in possession of technic manuals on how to produce bioweapons. In 1980, a *Red Army Faction* safe house reportedly discovered in Paris included a laboratory containing quantities of botulinum toxin. In 1984, an *Indian Rajneeshee* cult, who had views on spiritual and sexual freedom, contaminated salad bars with *Salmonella* in Oregon causing more than 700 people affected. In 1995, a Japanese doomsday cult, Aum Shinrikyo, released sarin gas into the Tokyo Subway. This group had developed and attempted to use other biological agents such as Ebola, virus and botulinum toxin on at least 10 other locations.

In 2001, a discovered document in Kandahar, Afghanistan revealed an attempt to develop a bio-weapon agents by Al-Qaeda with the help from a Pakistani microbiologist expert. At the time, Al Qaeda considered obtaining bioweapon or WMD a religious duty. In 2001, in the United States powdered Anthrax was employed through the US Postal Service (USPS) directed to several news organisations, senators who killed 5 people and injured 17 others. In 2001, Yazid Sufaat, a Malaysian biochemist and a former army had developed Anthrax program for Al Qaeda. He viewed the agent was only useful for sabotaging not killing. In the case of Daesh in 2014, chemical and biological weapons facilities were found by security forces in northern Iraq and Mosul displayed the group planned to disseminate biological and chemical agents using drones. A Tunisian Daesh member's laptop seized in Syria that exposed 19 pages of manual and instructions on how to weaponise bubonic plague. Daesh also planned to use remote-control helicopters to distribute sarin and mustard gas as part of the attacks against unspecified targets in Iraq, North America and Europe. What distinguish contemporary bio-terrorism is the scientific advances that have been made understanding of how pathogens or viruses produced their toxins. On the other hand, this has also resulted in the discovery of a wide range of a new bioterrorism and bioweapons.



## TERRORISM AND COVID-19 PANDEMIC



**Figure 5: Coronavirus or COVID-19, A New Pandemic found in 2019**

In 2020, concerns over Coronavirus or COVID-19 being a bio-weapon have flourished. Coronavirus disease or better known as COVID-19 is an infectious disease caused by a newly discovered coronavirus. The virus is spread between people during close contact via small droplets produced by coughing, sneezing, and talking. Most people infected with the virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness. The first known human infections were discovered in Wuhan, China in 2019 before it was transmitted globally due to the movement of people internationally. According to world statistics, COVID-19 has hit more than 18 million cases with 680,000 deaths worldwide and 11,343,000 patients have recovered. The COVID-19 outbreak has already been declared a pandemic by the World Health Organization (WHO) on 11 March 2020. At this point of time, there are no specific vaccines or treatments for COVID-19. There are no medicines or vaccines that have been shown to prevent and cure the disease.

The pandemic effect on the world is not a conventional attack on government targets or the military. Rather, it is a widespread and indiscriminate attack on global citizens and the economy. This outbreak has indirectly impacted the lives of billions of people and their livelihood. Thus, making it the most effective model for future terrorist activities and a new model for circumventing the conventions of modern warfare. The pandemic of COVID-19 virus marked a benchmark for the threat of bio-terrorism to a high degree due to the risk and harmful effects of the COVID-19 virus on us.

### COULD THE COVID-19 BE USED FOR BIO-TERRORISM IN THE FUTURE?

The pandemic has also highlighted the vulnerabilities to new and emerging forms of terrorism, such as misuse of digital technology, cyber-attacks and bio-terrorism. The COVID-19 pandemic provides new opportunities for Daesh extremist group, Al-Qaeda, and their affiliates as

well as neo-Nazis, white supremacists and hate groups. The COVID-19 pandemic has indirectly given ideas to terrorist networks and extremist movements to possess biological weapons for future use of terrorist attacks. This desire can be seen in the narratives of the extremist movement and the terrorist networks that consider the emergence of the COVID-19 virus as a powerful weapon that can have adverse implications to socio-economic and global security as a whole.

A wide variety of terrorist groups have already integrated COVID-19 into their narratives and propaganda to exploit current events for their own purposes and achieve their goals. They use the pandemic to exploit divisions and weaknesses among their enemies. At the same time, challenged the counter terrorism efforts in respective countries. COVID-19 has also provided fuel for existing terrorist narratives with tropes being repurposed to intensify hatred towards particular groups.

Lockdown and curfew orders around the world also provide an opportunity for these movements to spread propaganda and bioterrorism narratives through the Internet mainly social media to attract the attention of the public. At the same time, they took this opportunity to gather followers and recruit new members including scientists who are in line with the movements. Terrorists are making bio-terrorism a popular topic among themselves. From the findings, we have found related narratives as follows: White supremacist movements used the chat-rooms platform in discussing the topic of biological warfare. Daesh even encouraged some of their supporters choose to stay at home while others continuing undertake jihad operations or *Amaliyah*. Al Qaeda narratives aimed at non-Muslims by spreading the call to study Islam during the lockdown. The militant group's six-page statement invites Western citizens to convert to Islam by studying the religion during the quarantine. Indonesia extremists are holding back attacks during the outbreak believing the 'end of the world' as foretold in their prophecies. Despite the lockdown, regional terrorist networks such as *Bangsamoro Islamic Freedom Fighters* (BIFF), *Dawlah Islamiyah*, *Abu Sayyaf Group* (ASG), *The Mujahideen of Eastern Indonesia* (MIT) and *Jamaah Anshorut Daulah* (JAD) seeing COVID-19 as an opportunity to continue attacks in the Philippines and Indonesia.

## WHAT FUTURE HOLDS ON BIO-TERRORISM THREAT?

*"If anything kills over 10 million people in the next few decades, it is most likely to be a highly infectious VIRUS rather than WAR. Not missiles, but MICROBES"*  
- Bill Gates in 2015 TED Talk titled *"The Next Outbreak? We're not ready"*

### Possibility and Modus Operandi

Biotechnology today allows biological weapon development to be conducted in extremely small areas with easily obtainable equipment. Even terrorist groups with modest means could produce small amounts of such weapons if they are willing to compromise on purity and safety. Terrorist needs to obtain precursors, component chemicals required to produce a lethal chemical compound. These can be stolen, purchased, or manufactured. Most precursors have industrial uses. Therefore, they are commercially available. Terrorists might buy precursors in small amount, manufacturing precursors from simpler compounds or obtaining chemicals from suppliers not covered by controls. Another capability under this range is the existence of clandestine labs that can be found in farms, garages, apartments, and safe houses for producing such weapons illegally. The other way around, terrorist might also break in the labs to steal chemicals and tools for their operation. In the aspect of delivering the biological weapon, the population density of the attack area is an important factor to cause casualties. Good conditions for a chemical attack include a temperature inversion where air is trapped over a target area. Much easier is a deploying small



quantity in confined spaces such as buildings or subways using a simple release mechanism or ventilation system. This could expose to thousands of people.

Terrorist can also exploit toxic chemicals used for industrial and commercial purposes. Objects like railcars, ships, tanker trucks, pipelines and trucks carrying barrels of poisons or other hazardous materials as well as chemical manufacturing and storage facilities are prospective weapons for bio-terrorism. Terrorists might recruit any physicians or microbiologists to handle the chemicals and agents. In the aspect of circulating propaganda through the social media and Internet, terrorists managed to recruit high-tech savvy youngsters to meet their cause. Hence, this is also inevitable for the same purpose in recruiting scientists to develop biological weapons for their future attacks. They might receive incentive or reward financially if they obliged as long as they could provide biological agents to terrorists.

Those who have access to biological agents at their workplace could benefit terrorist organisations. Many governments and private research institutions, biotechnology and pharmaceutical companies and universities working on life sciences research and with various pathogens which can be obtained by evil doers if biosecurity measures are not in place. Open access to biological research and scientific information through the internet is a concern as this information can be readily acquired by terrorist networks or a lone wolf to develop bioweapons to launch attacks. There are a lot of reports regarding terrorist networks and *lone wolves* who attempted to launch terrorist attacks after accessing details in the internet on how to produce homemade bombs and other bio-weapons from home. Aside from making and delivering biological weapons, terrorists can attack a vast array of targets with anything from mild pathogens to very deadly ones. Despite spreading fear, terrorists are able to use bioweapons to inflict more damages by targeting public and security forces. In Indonesia, in June 2011, a terrorist network of *Jamaah Anshorut Tauhid* (JAT) had attempted to kill policemen by poisoning their food using Ricin at a canteen. The incident was the first terror plot in Indonesia that employed a biological toxic agent.

Another case was reported in October 2019 when the Indonesian police discovered a cell of JAD had plotted a suicide attack using a bomb contained the *abrin* poison in Cirebon, West Java. They had targeted a local police station and a place of worship in Cirebon. Police also seized 310 grams of *rosary pea seeds* which is the main ingredient of *abrin*. The police's forensic test revealed that around 0.7 micrograms of *abrin* could kill 100 people. Manual and information on how to alter a microorganism's DNA had become easily available with the rapid development of bio-technology and bio-engineering. Terrorist groups or *lone wolves* can potentially use such information to create a new and deadly superbug that is resistant to medical treatment or to recreate eradicated germs. A large agriculture industry and biological weapons can be used to attack plant and animal resources.

## COUNTER ARGUMENTS ON BIO-TERRORISM THREAT

Although terrorist networks have won in inflicting fear in the public for the sake of media attention, they have not fully succeeded in conducting bio-terrorism for several matters: The impacts have yet resulted in big scale deaths. We have evaluated that most of the cases of bio-terrorism by terrorist movements has resulted less than 50 deaths compared to the bombing attacks or mass shootings that inflicted hundreds of deaths and injuries. Technical challenges in terms of providing and handling the biological weapon could be the obstacle which provides limitations for the terrorist to prepare the deadly agents. At a technical level, launching a sophisticated, large-scale bioterrorist attack involves a toxin or a pathogen generally a bacterium or a virus which needs to be

isolated and disseminated. But this is more difficult than it seems. As well as advanced training in biology or chemistry, isolating the agent requires significant experience. It also has to be done in a safe, contained environment, to stop it from spreading within the terrorist group. Though not impossible, it is unlikely that terrorist groups possess the resources, stable environment, and patience to do likewise. In 2017, Daesh had failed in its test using Ricin on their detainees where not a single one has died from the biological agent. It was only fatal on hamster. Pathogenic viruses such as *smallpox*, *Ebola*, *Marburg*, and *Lassa* are extremely hard to find, isolate, and spread. *Botulinum* and *ricin* are dangerous toxins, but not contagious, while *Tularemia* cannot be transmitted from human to human. This leaves only *Anthrax*, a soil bacterium which is relatively easy to obtain. Even so, isolating a highly pathogenic strain is difficult. More importantly, *Anthrax* is not contagious, and while its spores are durable and affected areas can be hard to de-contaminate, it is unable to spread on its own like the COVID-19 virus. Small-scale attacks using *Anthrax* or other agents may be possible, but the risk of a highly advanced, weaponised pathogen that spreads among large populations a terrorist-initiated biological doomsday is still very low. The only exception is if terrorists received support from a state, acted as its proxies or able to draw on its resources. In the case of Al-Qaeda, the group might only succeed in developing the *Anthrax* but failure to proceed other forms of biological weapons due to the War on Terror against them in 2001. The campaign had not only destroyed their hidden lab in Afghanistan, it also led to the capture of high-profile experts of the groups or killed in the operations.

## CONCLUSION

The threat of bio-terrorism by terrorist networks and extremist movements is still at low level but not impossible. Bio-terrorism has evolved rapidly in line with the development in science and technology. Advances in bio-technology have opened the doors to many possibilities of creating new diseases and novel pathogens in which could benefit terrorist organisations. Terrorist groups have positioned themselves to exploit the opportunities of a post-COVID-19 world as they have seen how effective the pandemic has affected our lives and disrupted the global economy as well as affecting security aspects. It is riskier and more dangerous if the terrorist networks able to produce bio-attack that might resemble and replicate the deadly virus. A successful bio-attack has the potential to have much worse consequences than the current COVID-19 outbreak. Although terrorist networks and extremist movements face limitations and challenges, it is vital that we do not ignore the potential of these threats and underestimate their capabilities. Terrorist movements are capable of doing anything to gain access to biological weapons for their survival in achieving their objectives. Therefore, precautions and on-going monitoring need to be taken appropriately to prevent terrorist networks and other extremist movements from taking the opportunity in their favour to launch bio-terrorism attacks. In addressing the issue, it is necessary to start from the beginning by taking precautionary measures to avoid any potential threat related to bio-attack. These include monitoring terrorism situations and terrorist activities, evaluate future threats of bio-attack in order to response when bioterrorism attack occurs. Other preparedness including health-care and industrial providers should maintain awareness of biological agents with bioterrorism potential and consider the presence of unknown pathogens, clinical and environmental surveillance needs to increase to avoid any risk from potential non-state actors notably terrorist. To improve preparedness for natural and bioterrorist outbreaks, international cooperation should also include joint exercises involving multiple countries and constant improvement in the exchange of information on potential bioterrorism threats and management. Countering bioterrorism also involves strengthening diplomacy for such needs. It is also can be done through the international platforms including the Biological Weapons Convention (BWC) and the implementation of UN Security Council Resolution 1540 along with World Health Organization (WHO) and the World Organisation for Animal Health for existing guidance, procedures and standards. Each nation should have a comprehensive strategic action and crisis management plan in the event of an outbreak or bio-attack.

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## **MILITARY POWER AS AN INTEGRAL ELEMENT OF NATIONAL POWER- QUANTIFYING MALAYSIA'S PERSPECTIVE**

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### **ABSTRACT**

*National security is a subject which covers a broad range of issues and threats which will be handled intricately via governance and statecraft. The purpose of this study is to identify the factors which determine how does the military will become the “integral” element of national power. Nevertheless, the empirical understanding of how do elements of national power interact and influence national goal and behaviour were seen as a crucial “threshold” that enable an evocative knowledge on how do these elements interact. As a result, states can co-exist within the international system. The findings will establish a well-defined illustration of the military “causal-relation” within the national power calculus. The mixed-method research design was applied in this study to examine the causal-relationship amongst the elements of national power focusing on the military. A cross-national approach was embedded within the study to give a comparative overview perspective with the unit of analysis at the state level, i.e., Malaysia and the international system (selected Indo-Pacific nations). The most significant observation is made in this study would be the ability to proof the causal-relationship of military power within the national power schematics through the empirical mixed methodological approach. The study had observed that the military is integral within the national power equation, it promotes peace and national behaviour within the international system. The military provides the critical need to provide safe and secure environment through the application of what is known as an “active power”. A Causal-relation model through the integration of Cline’s Perceived Power Model and Lowy Institute Power Index Variables able to describe and explain military power within the context of national power. Thus, the concept of “the will to response to threat” is considered natural and primal national behaviour and Malaysia able to adapt and adopt the model to facilitate its own national decision-making mechanism.*

**Keywords:** *Co-exist, Cross-national, Causal-relationship, Indo-Pacific, National Security, Cline’s Perceived Power Model, Lowy Institute Power Index Variables*

### **UNDERSTANDING NATIONAL POWER**

The notion that the concept of national power of a state are purely for self-survival and having self-interest were seen primal. The state’s survival mode is indefinitely integral amongst the elements of national power which operates as a single unified mechanism which transcended the sense of actual power . It rationalises the existence of a state as a contiguous entity within the international system through the ability to realize one’s will despite the (possible) resistance or opposition of others. Within the context of international relation, state security will be prescribed through the application of military power as dividend of peace and a coherent security system (Mcsweeney, 1999). Thus, the ability to determine causal-relationship amongst elements of national power (particularly military power) were seen crucial. Quantifying the elements through intricate measuring instruments are perceived to be logical and enabled a cross-national analysis (Chang, 2004), earlier scholars had proposed measurement based on interrelation of geopolitical zones and elements of national power (Cline, 1977), structural interactions amongst states stipulated by the power transition theory (Kugler, 2012) and comprehensive national power (Bajwa, 2008).

The geopolitical outlook both regional and internationally are complicated and competitive in nature. The ability to assert its influence via power status are seemingly rational in a sense, in order to survive and being relevant within the complex international system. Consequently, the aspiration are seem imminent and sensible with the notion of shaping international relations that promotes and preserves states' sovereignty (Said 2019). Therefore, by taking Malaysia as the unit of analysis this study will focus on the interaction or causal relations of elements of national power particularly military power in conjunction with the national interest via specific statecraft. Cross-national analysis in conjunction with other measurements methodology in determining the causal-relationship amongst elements of national power (particularly military power). This is in conjunction with the notion that the ability to determine such causal-relationship is crucial for national behaviour and statecraft orientates itself within the global geostrategic power play.

## **POWER AND INTEREST-MALAYSIA**

Liew Chin Tong had suggested a critical notion that the present global security architecture is much more complex than ever and having the cold war characteristics and behaviour. In a talk to delegates of the Fullerton Forum, he seriously had called for states to acknowledge the end of the World Order that has been in place since 1989 and to look for a new one for the coming decades which prescribes the national interpretations of a new security challenges for Indo-Pacific regional countries (Teng 2019). The evolving strategic environment of the Asia Pacific region is constructed from various attributes namely; the by-product of colonial issues (i.e. overlapping territorial claims), emergence of China regional *hegemon like* influence, regional rogue states (i.e. North Korea), aftershocks of globalisation in the international economical and sociological ecosystems had induced instances of non-traditional transnational security issues and the infusion of domestic internal security instability. It had instigated a situation which is unpredictable and sometimes beyond comprehension, which occasionally has the black swan effect (Taleb, 2007) due to the myriad of actors (state and non-state) involved within the complex crisis edifice. In a book entitled *Defending Malaysia* by Datuk Seri Mohamad Najib (former prime minister), he mentioned that there are still no indications what form and shape the regional security landscape will eventually take and stating that it was still nebulous to be comprehended (Razak, 2001). Based on the fact that *we are living in a dangerous time*, he later explored with the concept that the source of conflicts came from internal and external factors.

Notably, internal factors are due to break down of democratic systems which may lead to domestic turmoil while external factors are issues erupted within identified regional flashpoints that are due to state-to-state issues. He later concluded that, as an ultimatum, Malaysia has to be resilience in ensuring its own defence and security through a comprehensive approach which entails military defence as the core to the nation's total defence superstructure. The idea to be a middle power for Malaysia was nothing new, during the first tenure of Tun M (Mahathir 1.0) as stated by Nossal and Stubbs, Mahathir's strong domestic base; his seniority among world leaders; and the reputation he gained for being prepared to speak out against the practices of the West (especially the United States) were the perception within the broader international community, that Malaysia had come to occupy a middle-power leadership role. Throughout the region politician and scholars alike are having professional discourse (the debate and discussions were based on the national behaviour projected internationally, it includes these attributes; initiatives, activism and influence in seeking a fairer international order, ensuring global peace, as well as protecting regional security, stability and prosperity) whether Malaysia should be considered as a middle power (Ahmad, 2019)? He reemphasised that the new geopolitical order would be a multi-polar one with the US still the strongest power, but closely followed and matched by China alongside several very strong middle powers (Teng, 2019).



## MEASURING NATIONAL POWER

The measurement of national power is a critical issue (Baldwin, 2002) to be addressed by the policy makers. One practical reason for this is that such measurement is an integral part of cross-national analysis. Another reason for the ability to measure and to quantify power is to enable policymakers and strategists to have a precision accounts of systemic concepts such as polarity, balance of power and power transition. Based on Baldwin, the concept of measuring national power is difficult and complicated due to these limiting conditions; first, there is a gap between potential and actual power, whereby this gap results from intangible factors such as will, capacity, mastery, or skills which are difficult and virtually complex to quantify. Second, power as money is a misconception because power, especially in various political forms is relatively low in fungibility. As stated through Dowding, he suggested that power plays some role in international politics that money does in a market economy, political power resources do vary in degree of fungibility (Dowding 2011).

In the book *Performance of Nation* by Kugler *et al*, had later developed and test specific measures of the performance of nations at the global level. Over time and with promising results, the scholars involved realized that the measures used to compare one nation with another globally would be even more powerful at the subnational level which prescribes these levels of analysis namely Global (national), Subnational (provincial and state), and Local (city). Correspondingly, Kugler also employ these expressions interchangeably in prescribing the performance of the state namely; political capacity and political performance. Apart from that, Organski and Kugler also theorised what is known as power transition theory, Power Transition defies traditional typecasting. It is neither realm nor idealist, though some scholars have placed it in the former category. We prefer to call it rationalist. That is, it is structural, yet dynamic, since it recognizes that policy interests are at the core of all disputes. Subject to empirical testing, it meshes well with objective conclusions now from history. Thus, it marries empirical evidence with traditional scholarly research and sound policy advice. It is a theory that lends itself to a blend of the empirical and policy worlds (Tammen et al., 2000). Chang debated the measurement of national power is a critical issue and the enumerative data is an integral part of cross-national analysis, the results obtained enabled policy makers or political elites to have a calculable and accurate interpretations of a systemic concepts for example *polarity, balance of power and power transition*. Consequently, the ability to quantify elements of national power will enables statesmen or state-craftsmen (power elites) to have a situational awareness and illustrative representation of the state performance in relation to the ability to use and to harness the full spectral potential among those elements within a cross-relational mechanism.

The capacity to measure power through mathematically procedures enables governments to equate states through intricate illustration of quantified power indicators. The ultimate aim of these measurement and formulation are to delimit the complexity of comprehending a subjective and qualitative nature in understanding national power and how would be an exceptional indicator in providing guidance to statecraft. Beckley through his study affirmed that, the primary aim of the formula construct and quantitative methodology was primarily complexity reduction, which aims to transform a multifaceted “something” into unidimensional values, which in turn approximate national power (Beckley, 2018). A case in point, as mentioned prior that power is an elusive concept. The deductive reasoning in measuring power is predominantly to provide a benchmarking processes that able to provide an empirical indicator for nations within a range of metrics and indexes (Singh, 2012). These results will provide statesmen or political elites in identifying the domestic weakness of a state or in relation to other state which are relevant within the context of international relations.

## KEY QUANTIFICATIONS CONCEPTS

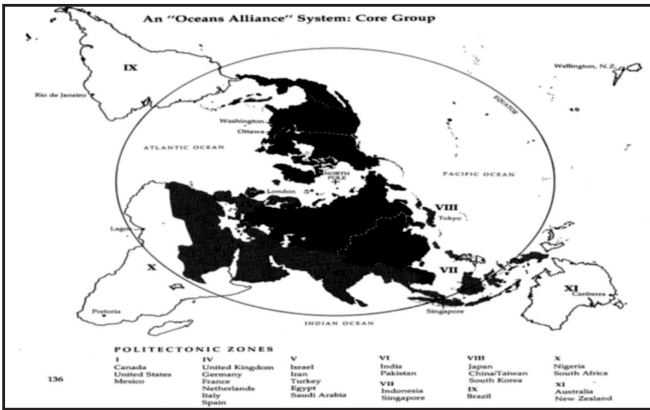
This notion brings out the Janus-faced notion of “power as resources” and “power as outcomes” (Tellis et al., 2000). Therefore, the quantification concept is merely conjugating both tangible (quantitative data) and intangible (qualitative data) within a single calculus algorithmic construct that provides a singular index interpretation which is comprehensible. The key point is that conceiving power “as an undifferentiated quantifiable mass” offers little insight into the potential for actual political success of the states being ranked. The quantification approaches employed within the formula construct are explained in Table 1.

| ARIABLE                       | CONCEPT   | ORIGIN  |
|-------------------------------|---|---|
| <b>Single Variable</b>        | Power in the real world is complicated, and that a single variable approach amounts to excessive reductionism   | Bertrand Russell (1938)   |
| <b>Multiple Variable</b>      | Contain more than one variable within an extensive multivariate dataset are unnecessary and complex mathematical manipulations                            | Johann Peter Süßmilch (1741)  |
| <b>Comprehensive Variable</b> | Focus on national strength, looking at the integrated use of political, military, diplomatic, economic, cultural and various aspects of national strength | Masayoshi Ōhira (1980)<br>- Japanese Prime Minister<br>Deng Xiaoping (1986) |

**Table 1: Power Measuring Formula Quantification Approach**

*Source: (Höhn, 2011)*

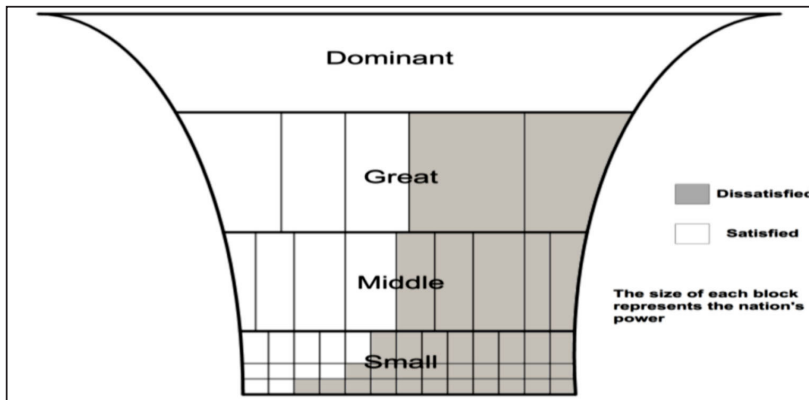
Based on the characteristics and utility, this study had chosen three measuring concepts and formula constructs specifically; Cline’s Perceived Power, Organski and Kugler’s Power Transition Indexing and Sino-Japanese’s Comprehensive National Power and the Composite Indicator of National Capabilities. Cline’s Perceived Power, is centred in his emphasis on geostrategic regions and constant change in power known as the “strategic drift” which later lead him to defines power as the ability of one government to make another government do what it would otherwise not do via persuasion, coercion, or military force. The formula provides state’s ability to construct a comprehensive quantitative illustration which later understood as the multiplication of hard and soft power which depicts its significance within the political reality. Nevertheless, cline’s formula was considered monumental in illustrating the assessment based on all elements of national power within the international system known as “Ocean Alliance System”. Figure 1 appropriately illuminates the model.



**Figure 1: Ocean Alliance System**

*Source: (Cline 1977)*

Organski and Kugler's Power Transition Indexing, grounded within the premises of the Power Transition Theory which states that the likelihood of war between major powers increases as the power of a dissatisfied challenger increases to parity with the dominant power. He later improved the notion by expressing that power is more than resources by describing the ability to utilise these resources in influencing other states in compliance with their national interest (Kugler, 2012). Founded on these postulates, Kugler identified these determinants of power; natural (which includes geography, natural resources and population) and social (includes economic growth, political development and national behaviour). Relatively, he had established the notion that all determinants which are also elements of national power share a complex multidimensional inter-relationship and the theory believe that the pattern of a dynamic power relationships within the international system provides a "probabilistic tool" that able to measure structural changes which enables forecasting of national behaviour either they (the state) are preserving peace or waging war (Tammen, 2018). As a result, it creates a hierarchical construct which defines the regional and global power structure which are clearly illustrated in Figure 2.



**Figure 2: Global Power Hierarchy**

*Source: (Tammen 2018)*

Finally, CNP which is an actual representation of the general power of a nation-state which combines or integrates all elements of national power as a superstructure within a single unified eco-system. Scholars from both China and Japan are the main proponents of this concept. Conceptually, J.S. Bajwa proposed that it has a wider coverage, stressing comprehensiveness and all aspects, apparently including material strength, ideational ethos and international influence (Bajwa, 2008). Based on Kugler's work, he proposed that an alternative frequently used by scholars in related analysis is the Composite Indicator of National Capabilities (CINC) that aggregates and weights equally six indicators: military expenditures, military personnel, energy consumption, iron and steel production, urban population and total population. He argued that the advantage of CINC is its availability and common use that secures easy replication within a broad range of study regarding measuring and understanding the cross-elements relationship of national power.

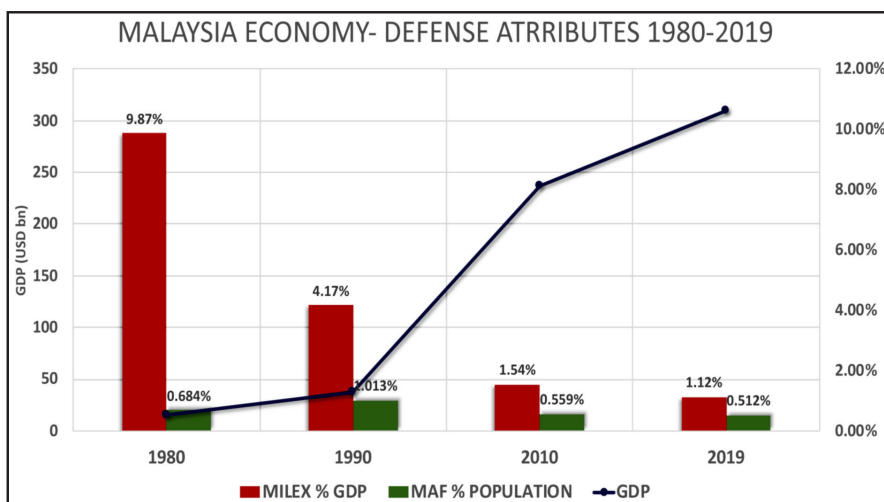
## CROSS-ELEMENTS ANALYSIS

The non-linear relationship between material power and actual power (ability to achieve a political outcome) has been one of the most contested themes among political scientists (Singh, 2012). Baldwin in his seminal work postulates on the paradox of "unrealised power". The paradox is caused by two factors: the lack of will or skill in the effective use of power and what is known as the capabilities of an actor must be contextualised in a policy contingency specifying the "degrees of a situation" (Baldwin, 1979). As a result, the state acquires the inability to convert

power into a political outcome. Power conversion requires state elites to comprehend the utility of each elements of national power both tangible and intangible in producing the desired outcome. Thus, cross elements analysis will provide the study the ability to interpolate these elements and variables within a multi-dimensional construct. Based Zorawar argued that a multiple variable approach is therefore necessary in understanding how does all elements and instrument of national power interacts within the geostrategic ecosystem (Singh, 2012). Cline's approach referring to critical mass, economy, military, strategic purpose and national will were since viable in conducting the cross-element analysis through scrutinising all variables involved within the conceptual framework of this study (refer Figure 3). Nevertheless, the weightage that each of these variables is assigned will be perpetually subjective in approach. Blatantly stated by Carafano, there are risks as well in establishing a standardized measure of military power and he further amplifies that "a bad measure will lead to bad choices" (Carafano, 2014). Military power is definable as the ability to achieve a specified wartime objective which are also an extension towards the national policy or interest. Nevertheless, statecraft will resolve to an optimised methodology employing these coercive capabilities (military) which is integrated with other instruments of national power in keeping the nation (as a close example – Malaysia) safe and secure which later promotes prosperity.

## CORRELATES OF NATIONAL POWER

A cross-national analysis which attempts to identify the cross-elements relationship within a construct of a state within the international system. The author observed that quantifiable procedures will able to reflect a distinct cross-element relationship within national power system specifically military power. The results are described in the following section. *Single Variable Approach* is the simplest method in determining element of national power. It utilises unilateral interpretation of respective elements values i.e., economy power characterised through GDP volume, military power evaluated from the military expenditure and the strength of the armed forces relative to the total population at that particular year. The results of these individual data were then cross-analysed via Time-Series Analysis which observed these values at a different set of time (in this case it was within a decade interval from each data points).

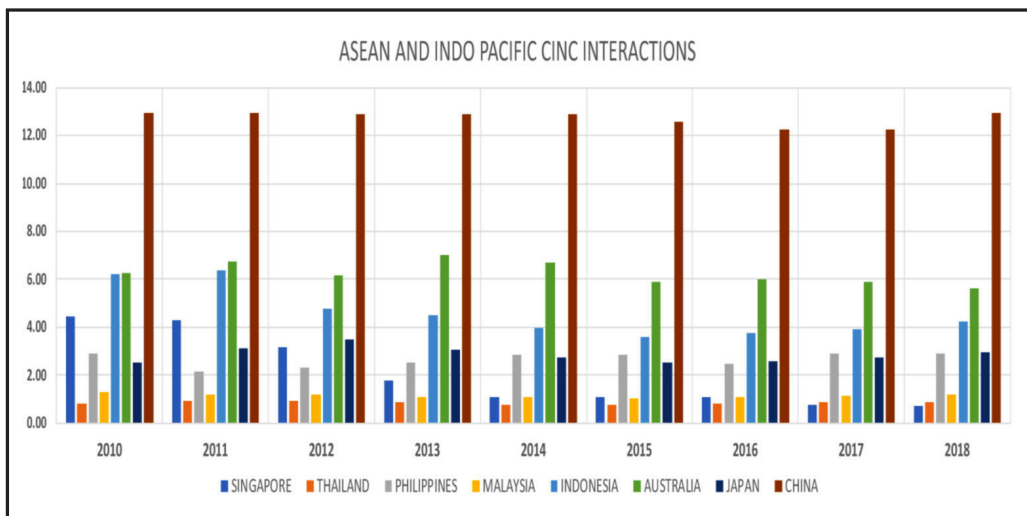


**Figure 3: Malaysia's Defence and Economy Attributes**

*Source: Computation by the author based on datasets from Military Balance of the respective years; 1980 (Iiss 1980), 1990 (Iiss 1990), 2010 (Iiss 2010) and 2019 (Iiss 2019).*

The plot indicates a negative correlation (-0.8412603) between GDP and military expenditure which indicates military expenditure reduced in the 90s due to post-cold-war geopolitical scenario as implied by Liew Chin Tong as “prolonged stable peace” (Teng, 2019). This is in contrast with the GDP positive growth during the last two decade. Nevertheless, it was observed that the responsibilities in safeguarding the nation’s population reduced from 1.013% in the 90s to a steady 0.500% from the last 10 years. The ratio for each soldier per-population was seen increased from 1:98.7 in the 90s and a surged of 1:195.4 in 2019. Therefore, through a pragmatic approach it is seen that military power (despite the decline) able to provide a safe and secure environment for the nations to grow. However, this notion is still debatable at this point due to the fact of a systemic construct between the elements of national power which are tangible and intangible.

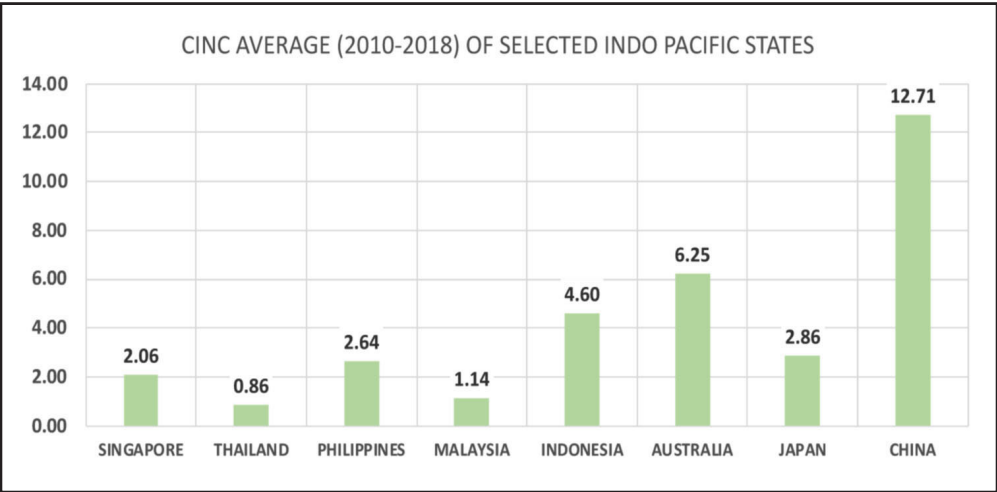
*Multi Variable Approach - Composite Indicator of national capabilities (CINC) Analysis.* The analysis is based on Richard J. Stoll Composite Power Capability Index and later, Kugler employs the methodology within their power transition analysis. The formula is indicated in Appendix A. Comparative data analysis was based on selected ASEAN members’ states and Indo-Pacific states such as Australia, china and Japan being exploited as a datum. In Figure 4, illustrated comparatively the CINC relations among analysed states from data collated since 2010. Malaysia was relatively low when its being compared to Indonesia and Singapore as prominent regional actors, whereas Australia, China and Japan surpassed all ASEAN member states in term of the CINC. It suggests the foundation of an active regional international relations mechanism utilising balance of power instruments (Tellis, 2015).



**Figure 4: Selected ASEAN Members and Indo Pacific CINC Interactions**

*Source: Computation by the author based on Datasets from The World Bank (World-Bank 2019) And Sipri (Sipri, 2019)*

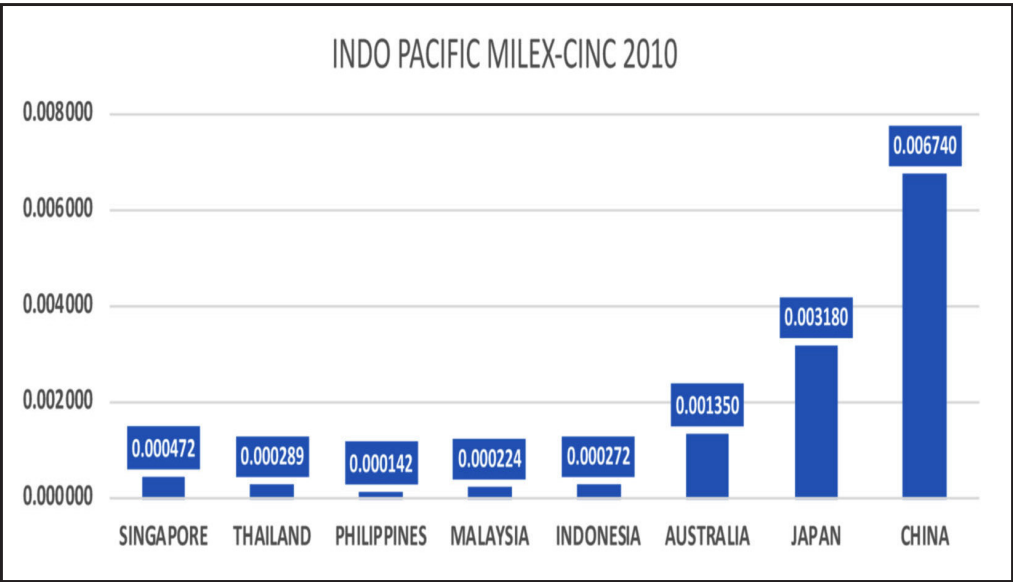
Providing a general outlook on the regional balance of power outlook from the last decade it saw Indonesia being prominent as far as material power is in concern, its strength lies on its critical mass – population which has positive effect on other elements of national power. Figure 5 provides a distinct comparative illustration on the regional geo-strategic outlook which saw how middle power state (Australia and Japan) being equated with China as the emerging superpower. It’s also indicates how small and middle power states will balance itself within the intricate bilateral and multilateral diplomatic instruments.



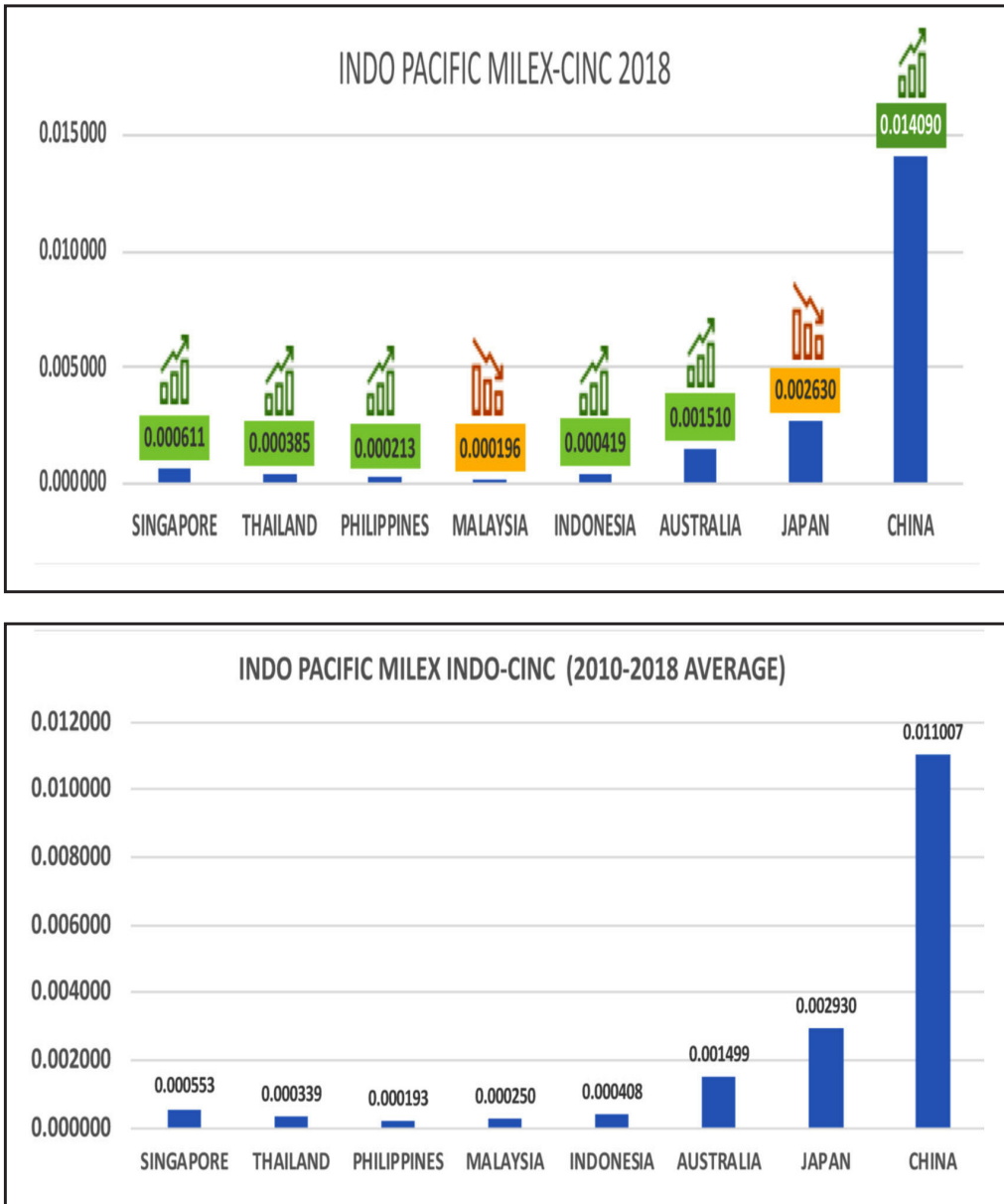
**Figure 5: Selected Indo-Pacific States CINC Average**

*Source: Computation by the author based on datasets from the World Bank (World-Bank 2019) and SIPRI (Sipri 2019).*

Looking inwards, how does Malaysia articulate itself within the regional geostrategic powerplay? The CINC transcends the performance of its material power or intangible elements of national power. Predominantly, military power provides the indicator of such capability as imposed by Mearsheimer’s offensive realism. Figure below, provides a vantage point of the relationship between military power and CINC outcomes of Indo-Pacific states. It was observed within the span of 8 years (2010-2018) all states had a military CINC increment except for Malaysia and Japan. For Japan it’s an obvious result since it has an international restriction over militarisation (Tellis, 2015). Whereas, Malaysia had relatively been influenced by internal politics and economic developments (Hassan, 2018).



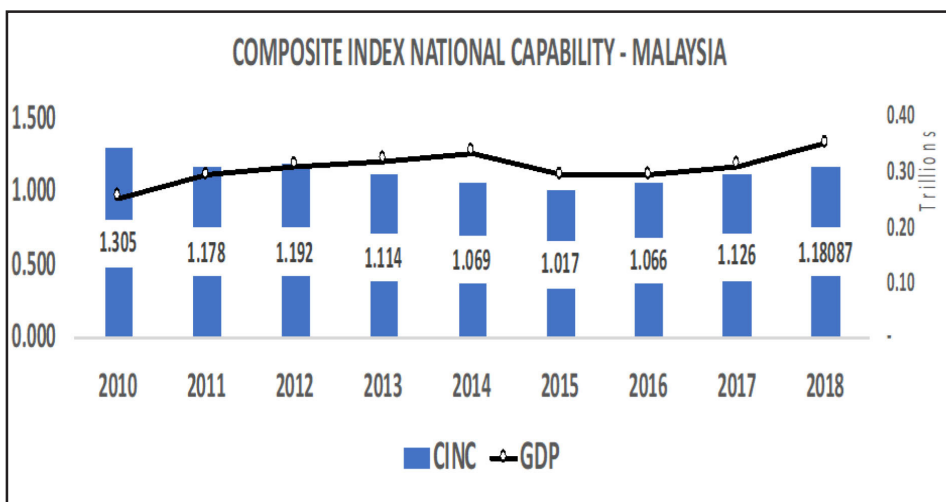




**Figure 6: Indo-Pacific MILEX-CINC Comparative Analysis**

*Source: Computation by the author based on datasets from the World Bank (World-Bank 2019) and SIPRI (Sipri 2019).*

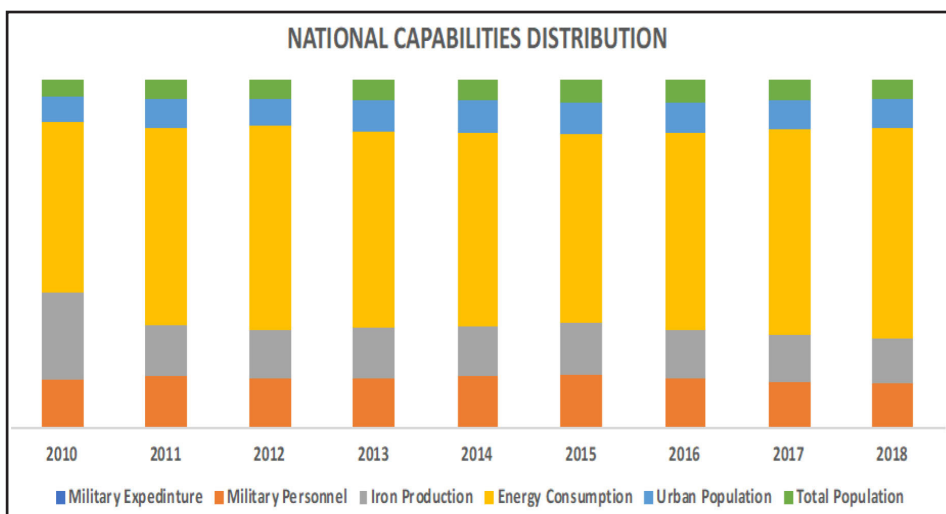
In relation to the perception of the outcome or product of an increase in the CINC, the author sees that GDP is the best to indicate such positive relation as stated within the context of the research design that hypothesized a positive national power outlook will be resulted in a positive economic growth. Figure 6 able to provide such relations where the increase of CINC from 2015-2018 saw an increase of the GDP relatively.



**Figure 7: CINC Analysis - Malaysia**

*Source: Computation by the author based on datasets from the World Bank (World-Bank 2019) and SIPRI (Sipri 2019)*

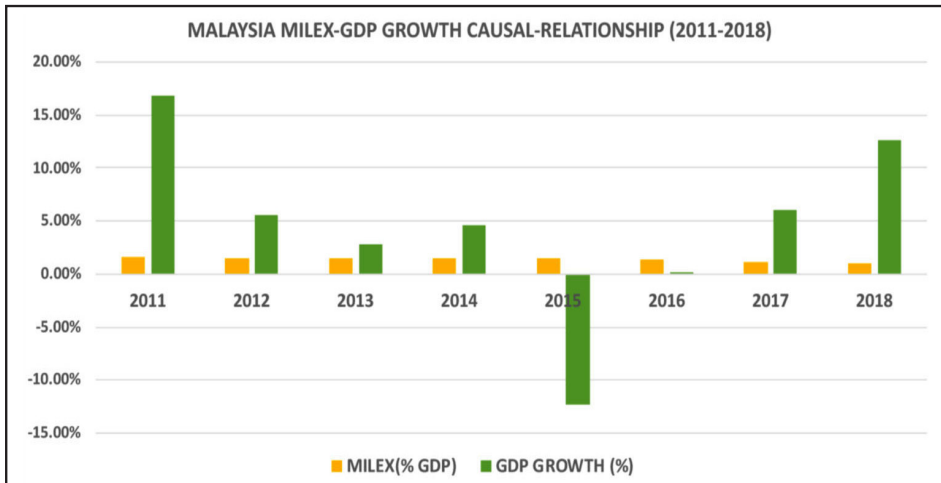
Then the next question will be, what makes the state performs itself within the international system. Figure 7 illustrates how does these elements being distributed in the national power construct represented by the CINC.



**Figure 8: CINC Capabilities Distribution – Malaysia**

*Source: Computation by the author based on datasets from the World Bank (World-Bank 2019) and SIPRI (Sipri 2019)*

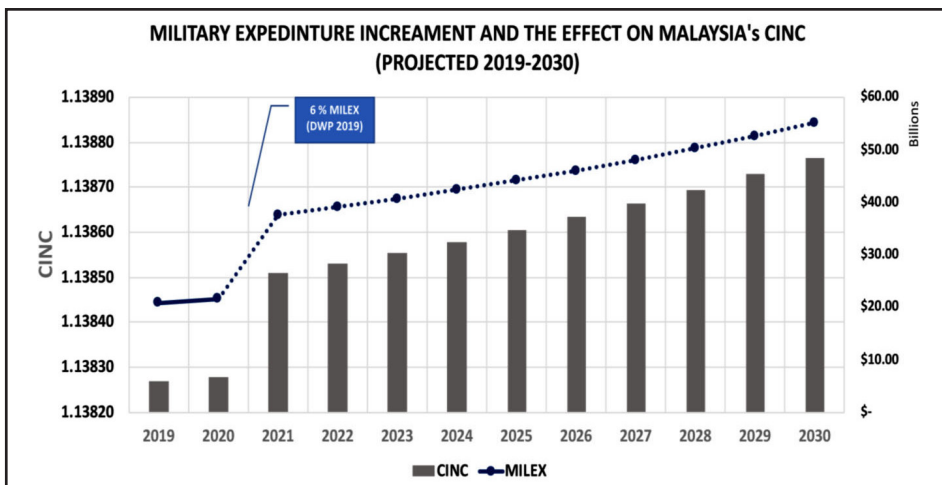
Whereas, the relation between military power and other elements based on the national outcome which is the GDP is evidently exemplified in Figure 8. The relations show that the military provides an unwavering safe and secure environment in facilitating positive economic growth. Nevertheless, the relations between both are cyclical in nature, where military provides security thus promotes economic prosperity which in turn enable the state to fund its military for emerging threat and challenges.



**Figure 9: Causal Relationship Between Military and Economic Power**

*Source: Computation by the author based on datasets from The World Bank (World-Bank 2019) and SIPRI (Sipri 2019)*

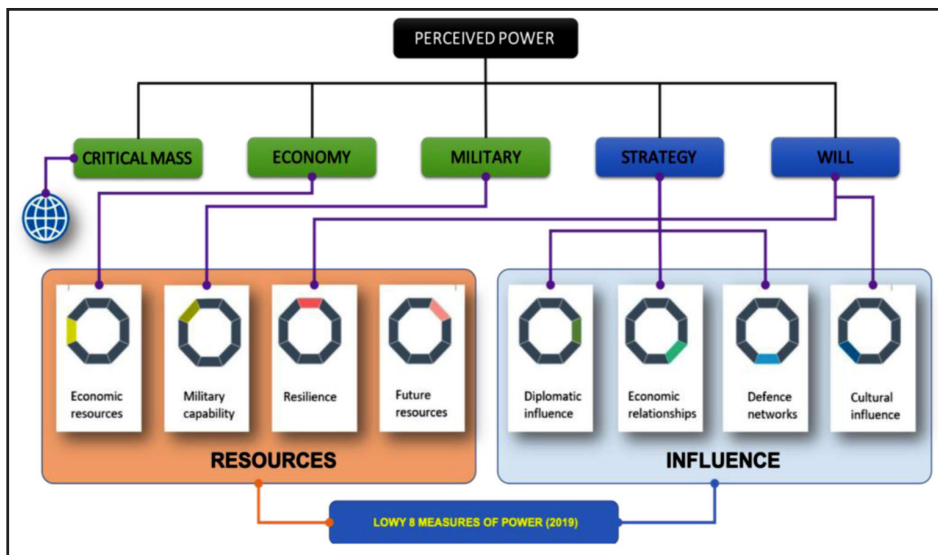
This cyclical nature of military elements of national power, requires significant budgetary commitments. National behaviour and strategic culture of the state will decide “how much if worth it” (Ananthan, 2017). In addition to that, post GE-14 sees a national transformation within the premise of international relations (Ministry of Foreign Affairs Malaysia, 2019) and its defence policy (Parameswaran, 2018). Therefore, Figure 9 provides the vantage point over the projection of Malaysia’s CINC post Vision 2020 and going beyond in to the era of a shared vision and prosperity as a nation-state (Ministry of Foreign Affairs Malaysia, 2019).



**Figure 10: Military Power Causal Relationship to National Power via CINC**

*Source: Computation by the author based on datasets from The World Bank (World-Bank, 2019) and SIPRI (Sipri, 2019)*

*Perceived Power Analysis.* It derived from and integration of two theoretical formula namely; Perceiver Power (Cline, 1977) and Measures of Power index (Lowy-Institute, 2019). The integration are based on the methodologies inspired by (Hohn, 2012) and (Chang, 2004) and it is illustrated through a model in Figure 11.



**Figure 11: Cline-Lowy Perceived Power Model**

*Source: The author interpretations and design.*

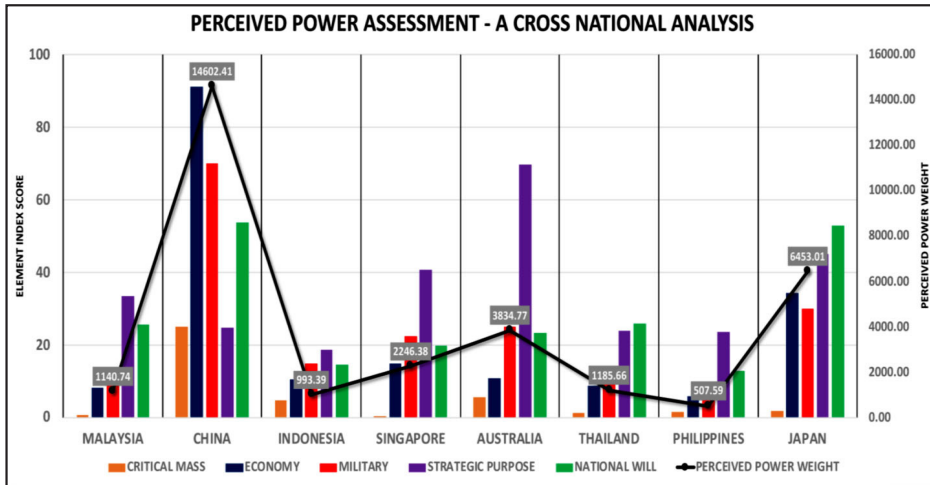
The result demonstrated a consistency with the findings obtained in the CINC analysis. The result enables a far more precision and comparable groups to be compiled through a perceived power weight or index. Using 2019 datasets, the rank list is as shown in Table 2. The computed perceived power weight of selected ASEAN and Indo-Pacific states were comprehensively depicted in Figure 11.

| States      | Pp       | Rank | Lowy's Power Status |
|-------------|----------|------|---------------------|
| China       | 14602.41 | 1    | <i>Superpower</i>   |
| Japan       | 6453.01  | 2    | <i>Middle power</i> |
| Australia   | 3834.77  | 3    | <i>Middle Power</i> |
| Singapore   | 2246.38  | 4    | <i>Middle Power</i> |
| Thailand    | 1185.66  | 5    | <i>Small Power</i>  |
| Malaysia    | 1140.74  | 6    | <i>Middle Power</i> |
| Indonesia   | 993.39   | 7    | <i>Small Power</i>  |
| Philippines | 507.59   | 8    | <i>Small Power</i>  |

**Table 2: 2019 Perceived Power Rank List**

*Source: Computation by the author based on the model depicted in Figure 11 and datasets from the World Bank (World-Bank, 2019) and Lowy Asia Power Index (Lowy-Institute, 2019)*

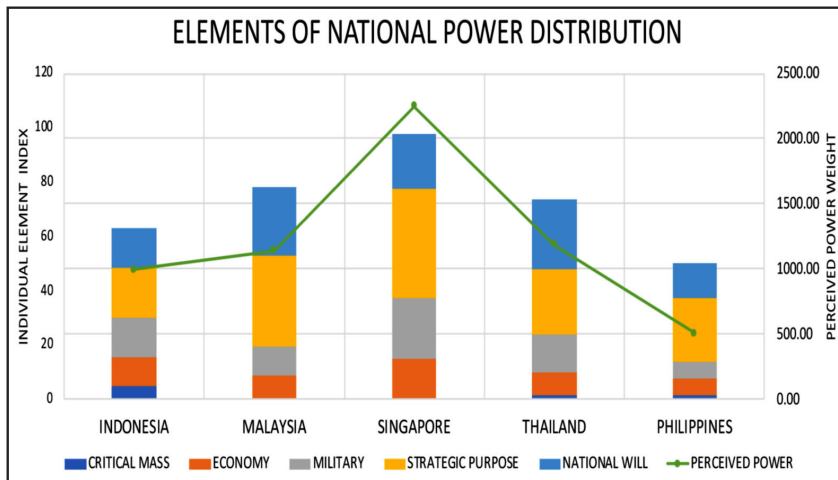
Figure 12, shows that perceived power was influenced greatly through the factoring of both tangible (namely; Critical Mass, Economy and Military) and intangible (Strategic Will and National Will) elements of national power. .



**Figure 12: Perceived Power Cross-national Analysis**

*Source: Computation by the author based on the model depicted in Figure 11 and datasets from the World Bank (World-Bank, 2019) and Lowy Asia Power Index (Lowy-Institute, 2019)*

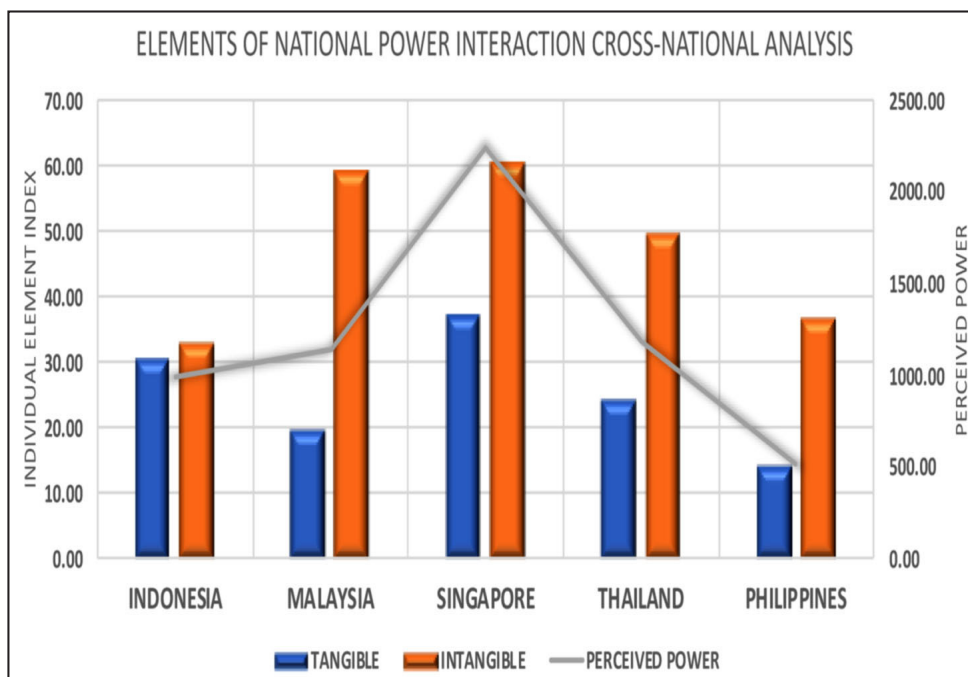
Subsequently, Figure 13 transcends the central idea and concept of national power and its elements. It was inherent that it's a unified super structure where each element plays a significant causative role within the state's mechanism. All elements demonstrate a causal-relation towards military power within both tangible (military capability) and intangible elements (defence networks)



**Figure 13: Cross-national Element Distribution**

*Source: Computation by the author based on the model depicted in Figure 11 and datasets from the World Bank (World-Bank, 2019) and Lowy Asia Power Index (Lowy-Institute, 2019)*

Based on the results depicted in Figure 14, it is viewed that a mathematical approach is possible to set a threshold of how best all elements both tangible and intangible would interact and react relatively in producing the required perceived power in accordance with statecraft. At this point, through a non-sophisticated normative average approach it is rational to set a 40% - 50% individual elements index threshold will give a projected perceived power weight from 1000.00 up to 1500.00 which reflects a middle power status as prescribed through Kugler and Organski.



**Figure 14: Elements of National Power Interaction**

*Source: Computation by the author based on the model depicted in Figure 11 and datasets from the World Bank (World-Bank, 2019) and Lowy Asia Power Index (Lowy-Institute, 2019).*

## NATIONAL POWER COMPLEX

The index from 1000.00 up to 1500.00 reflects a middle power status as prescribed through Kugler and Organski, Malaysia scored 1140.74 using this model, but the feeling in being a superior power status are more often to be reflected within the spectacle of the tangibles which is material power. It clearly illustrates three decades of national behaviour which corresponds to the earlier mentioned findings which entails such a causal relation between elements of national power which establishing the notion that the military is an integral element.

## THE MILITARY IS INTEGRAL

Based on the National Power Rankings 2019, Sulek et al argued that power of nations or states are consisted of economic power, military power (which is part of economic power itself) and geopolitical power (the product of interaction between economic and military power), (Białoskórski, 2019). This concept are pre-sets to power distribution and it qualifies to the power transition theory postulated by Jacek Kugler. Aforementioned, it is empirical (proven across the mixed methods analytics) that military power is integral to national power. The intricate evaluation processes which determines the integrality of military power were as described as follows. Based on the perception survey, the integrality of military power was seen influenced by other elements such as economic imperatives, national behaviour and the geopolitical outlook. It was later affirmed through a force ranking survey which demonstrates similar outcome. Liew Chin Tong describes the military as the most cohesive organisations within the government (Tong, 2019).



## CONCLUSION

The military power is the last resort as a crucial alternative for diplomacy, instead of being identified as hard power, coercion and active power he strengthened the notion that Malaysia as a nation state must retain a defensive posture in transcending sovereignty within the regional security architecture. Its conforming with the argument made by Jacek Kugler that the military as an active power, must be used in the advent event of conflict and rest assured conflict is inevitable. Apart from that, the military provides what is known as a “secure and safe environment” for other elements to operate within a “zero-sum game” milieu.

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## **THE IMPORTANCE OF NAVAL COLLABORATION IN THE POST COVID-19 PANDEMIC**

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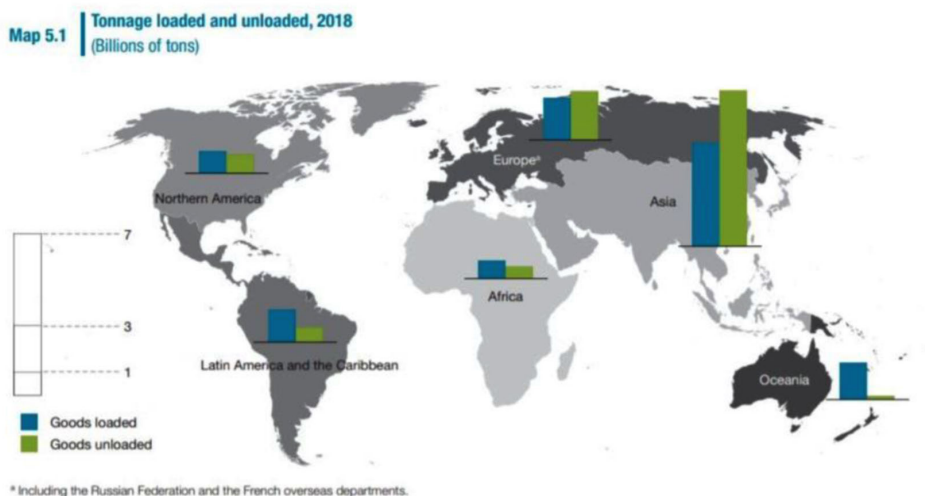
### **ABSTRACT**

*The world is shocked by the COVID-19 outbreak from 2019 til now. This pandemic affected the world economy, hence, triggering the issue of survival among the population. The importance of maritime routes to the world economy tempts unauthorized activities such as piracy, smuggling or hijacking of ships, as well as illegal immigrants. The significant problem is increasing, especially in Malaysia and this is analyzed as migration for survival. Malaysia seeks to establish relations with neighbouring countries to prevent border encroachment. This cooperation with other countries can facilitate in ensuring safer maritime routes while wait for the world economy to fully recover, as most countries use military methods to control these strategic and influential routes in order to protect national maritime interests and safe passage of traders or trade through direct routes, safe and economic and at the same time to prevent or reduce illegal activities. In addition, a structural change is needed. National Maritime Single Points of Contacts has been set up and special operations were conducted by several countries. In Malaysian perspective, the Malaysian National Task Force (NTF) was established to curb the COVID-19 outbreak from spreading through cooperation and inter-agency collaboration to reduce these attacks of illegal immigrants.*

**Keywords:** *Naval Collaboration, Defence Diplomacy, Maritime Stakeholders, Peace Stability, Lines of Communication (SLOC) and Air Lines of Communication (ALOC)*

### **INTRODUCTION**

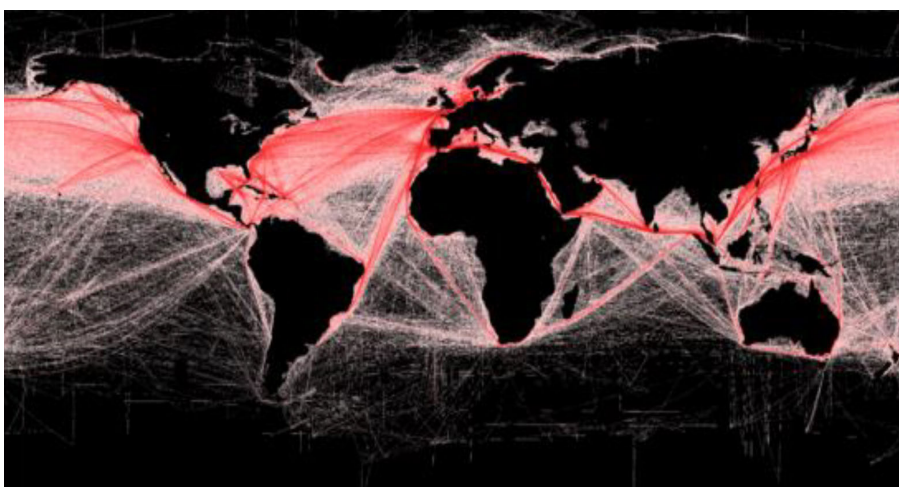
According to United Nations Conference on Trade and Development (UNCTAD) in 2020, maritime routes that interconnect all parts of the world account for roughly 80% of international trade, as opposed to other modes of transportation. Historically, the importance of maritime routes can be observed, as Maritime Silk Road was part of the famous Silk Road between 2<sup>nd</sup> century BC and 15<sup>th</sup> century AD, that interconnected between continents covering from Africa, Europe, Middle East, South Asia and China. This trade route can also be defined as the logistical network for cargo or passenger transportation that is deemed to be very important economically and cheap means of transporting goods and men to the selected destinations.



**Figure 1: World Seaborne Trade Volumes Rose to An All-time High of 11 Billion Tonnes in 2018**

*Source: Kate Whiting (2020) World Economic Forum*

*Image: United Nations Conference on Trade and Development (UNCTAD)*



**Figure 2: Shipping Routes Illustrates Relative Density of Commercial Shipping in World's Oceans**

*Source: Maritime Transport, Wikipedia*

Currently, the world shocked by the COVID-19 pandemic since 2019 until present days. This pandemic affected world's economy greatly, hence, triggered the issue of survival among the populations. The importance of maritime routes to the world's economy tempt uncalled activities such as piracy, smuggling or hijacking of vessels, and also illegal immigrants. The problem of the influx of illegal immigrants is increasing, especially in Malaysia and this was analysed as the migration for survivability. The great reduction of maritime border patrols by neighbouring states can be observed due to concentration and budget are now being focused to fight the pandemic.

However, awareness of the influx is increasing as Malaysia has taken the approach to further tightening the safety and security of the maritime routes and borders. Therefore, Malaysia strived to establish relations with neighbouring countries to prevent border encroachment from occurring. This collaboration with other countries can facilitate in ensuring that maritime routes are safer whilst awaiting the world's economy to fully recovered since most of the nations resorted to military means for control of this strategic and influential route with the aim of protecting national maritime interest and safe passage of the merchants or trades through direct, safe and economic routes and at the same time to prevent or reduce illegal activities. On top of that, special operations was taken by some countries and in Malaysian perspective, the Malaysian National Task Force (NTF) was established to curb the COVID-19 pandemic from spreading by means of inter-agency collaboration and cooperation to reduce the incursions of these illegal immigrants.

In the period of peace time, part of the navy's roles and responsibilities is to continue patrolling maritime domain to ensure the sovereignty of respective nations. Apart from that, the navy is carrying out training and exercises to ensure her personnel's competency or engaging with other navies in bilateral or multilateral training and exercises to maintain the readiness. However, the modus operandi during this pandemic outbreak changed mainly due to economic reason. Nation's defence programmes faced new budget pressures (Stashwick, 2020) and this indicated that naval collaboration need to be considered as the approach to maintain stability and peace in respective maritime boundaries. This issue has becoming real with many countries reallocating their budget to more pressing matters that will result in more significant issue, for instance, in South East Asia, the reduction of the navy budgets in key countries might threaten the balance of power by weakening their presence in a highly disputed area (Locherer, 2020) and might be taken into advantage by other party/parties.

## **DEFINITIONS**

Carvalho et al. (2016) stated that collaboration has become an essential requirement for an effective functioning of society and organizations. Pasquier et al. (2020) posited that the collaboration reinforced the shared objective to achieve the goal. Collaboration also known as a mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals (Parkinson, 2006; Hosseinipour et al., 2012). On the other hand, Lai (2011) and Dillenbourg et al. (1996) posited that collaboration is the mutual engagement of participants in a coordinated effort to solve a problem together. Collaboration can also be defined as finding creative ways of overcoming obstacles to mission success (Alexandria, 2020). Most importantly, it has to be made known as integration of activities and knowledge that require partnership of shared authority and responsibility (Morley and Cashell, 2017). Hence, collaboration (shared authority and responsibility) in naval perspective (mutually beneficial and well-defined relationship) can be understood as the integration on operation, training and exercises (integration of activities and knowledge), applying coordinated effort to solve problem with creative and innovative ways of overcoming obstacles to achieve common goals.

## **SIGNIFICANCE OF NAVAL COLLABORATION**

Due to global economy is badly hit by the COVID-19 pandemic, defence budget was greatly reduced in most of the nations. Hence, maritime criminality took advantage of a partial retreat of security forces due to economic turmoil. The risk of international tensions rising around



maritime disputes is fuelled by the weakening of multiple players. For example, in South East Asia, a region holding many disputed maritime areas, this situation is aggravated as maritime security is particularly reliant on the strength of naval forces to ensure stability. Prediction by analysts and economists that COVID-19 pandemic will create economic crisis globally has become reality. Locherer (2020) posited that this situation has already translated to defence budget reduction in many countries, with modernisation and new military acquisition being delayed and re-prioritised. This situation lead to reduction in the deployment of military forces, impacting diplomatic and military regional cooperation due to direct impact to the navy's budget, a key component of national sovereignty and security on highly disputed waters. As a result, multinational and bilateral exercises which enhance cooperative engagement have to be reduced, impacting response capabilities against threats to national interests or regional order.

Collaboration is very important to country facing various threats both from within and outside of the country. According to Malaysian National Security Policy (2020), the importance of collaboration is largely due to the position of Malaysia which has land borders with neighbouring countries and is located on the strategic maritime route of the Straits of Melaka and the South China Sea, making Malaysia vulnerable to cross-border threats such as smuggling (humans, wildlife, forest products, drugs, goods, and weapons), human trafficking, piracy, organized crime, cybercrime, money laundering, economic crime and robbery at sea etc. Due to COVID-19 pandemic, Malaysia need to strengthen defence cooperation with neighbouring countries to double patrols and security at the borders of their respective countries so that the influx of illegal immigrants whose health status is unknown can be curbed. *OP BENTENG* by the NTF was initiated to mitigate the problem and it is presently still ongoing. The integrated approach were taken with few government agencies took part in the operation and this clearly shown that the government is serious in protecting nation's maritime domain and sovereignty (Air Time News, 2020). Internationally, the collaboration between the Malaysian Maritime Enforcement Agency (MMEA) and the Australian Border Forces in a joint exercise conducted recently was to successfully combat maritime crime (Berita Utama, 2020). Apart from that, it has also been observed that extraordinary cooperation among the international organizations related to the maritime stakeholders and in particular shipping and ports, to collectively address the pandemic and minimize the risk for global trade and on human health (IMO, 2020)

In the safety and security perspective, Monthly Maritime Security Update (2020), reported the collaboration is in need to increase maritime safety and security. Such act as to avoid piracy and armed robbery, contraband smuggling, illegal unreported unregulated (IUU) fishing, natural events, maritime terrorism, irregular human migration, maritime incidents, and environmental security. Considerably, the collaboration is also importance to fight against extremism and extreme violence, maritime security and other security issues (Berita Online, 2018). The most glaring significance is some of the power nations might take advantage of the weakening of other regional actors, for instance, the situation in South East Asia that brings attention not only to the regional countries, but also to the great powers. Therefore, collaboration is also important to protect the nation from the great power nation. The intervention of superpowers in trying to resolve 'issues' will cause that country to take advantage based on their own interests. Such displays of force in such a time might bring forward renewed tensions in any region. Hence, the main purpose of collaboration is to build good relations and information sharing in dealing with uncalled activities in respective maritime domains.

## **DISCUSSIONS**

In Malaysia's Defence White Paper (DWP), 'Credible Partnership' is the third pillar of the nation's strategic defence. It encompasses international relationship through defence diplomacy concept, that has been a tradition to ensure national defence interest with capacity building arrangement also in place. It also further cascaded down to the MINDEF Strategic Plan 2021-2025, which is to strengthen the international arrangement in order to safeguard national defence interest. This to be achieved by balancing the regional and super power relationship, thus ensuring regional stability by engaging in bilateral or multilateral cooperation. With the cooperation, capacity building within the Malaysian Armed Forces (MAF) and domestic defence industry can be further enhanced in contributing to the regional peace stability and world peace generally. Concomitantly, naval collaboration is already important and COVID-19 pandemic made it more significant for the international community. In South East Asia perspective especially Malaysia, drastic reduction of defence budget made it paramount to the MAF generally and the Royal Malaysian Navy (RMN) specifically to embark or further enhancing the collaboration to mitigate unlawful activities in our maritime domain. Safety issue such as the safety of routes, sea lines of communication (SLOC) and air lines of communication (ALOC) are important to world trades. Therefore, ensuring the safe passage of the vessels or merchant navy are part and parcel of the collaboration. Security is another issue where part of the collaboration objectives, is to safeguard the sovereignty of nation's maritime interests.

With reduction in numbers of naval vessels on the world's seas, some countries might attempt to benefit from this situation by force. The South China Sea area, one of the most important trades routes in the world and subject to conflicting claims by many nations, has been the theatre of renewed tensions throughout the pandemic. An escalation in the conflict over territory in the South China Sea could have global consequences, and the 'control' of the region could potentially threaten shipments to other countries, and deny access to foreign military forces as well. Hence, the enhanced RMN collaboration with other neighbouring countries is recommended to ensure constant security. The RMN should enhance collaboration by uniting goals with dearest neighbours. Collaboration could not take place if each nation runs on its own. Thus, collaboration is to ensure that everybody has the same goal to achieve. In this heart of COVID-19 pandemic, Malaysia should take approach in minimalizing budget and focusing on health care. Therefore, this constraint can be overcome with the bilateral and multilateral collaborations and Malaysia will have the opportunity to sustain in the midst of this mishap.

## **CONCLUSION**

Many studies have underlined the threat of economic crisis resulting from COVID-19 pandemic. The pandemic has created a lot of constraints and restriction to the working system that affected world's economy and it will continue to impact the regional and global maritime security, anticipated not only in the immediate future but for some years to come. In the long term, economically burdened or stressed countries may become vulnerable where maritime criminality and international tensions might profit from the waning countries that unable to cope with economic crisis. To make things worse, great power nation might be unable to maintain their projection of force with depleting logistic supply-chain that is being burdened with the pandemic. The decline in spending and the reduction in military cooperation marked a real setback in the stabilisation of a vital region for international circulation and traffic. Hence, the naval collaboration in the post COVID-19 is not only important and paramount for Malaysia but to international community.

The impact of COVID-19 pandemic is going to affect the operational preparedness of the RMN in many direct and indirect ways. These depletions of supports are likely to decrease military capacity, and to weaken joint threat response capability due to a lack of maritime cooperation and joint exercises thus, making the sea to be vulnerable to unwanted activities named before. Hence, we need to reorient our response strategies to fulfil our roles and missions.

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## DOES UN PEACE OPERATION BRING PEACE?

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### ABSTRACT

*Peacekeeping has proven to be one of the most effective tools available to the UN to assist host countries navigate the difficult path from conflict to peace. Today's multidimensional peacekeeping operations are called upon not only to maintain peace and security, but also to facilitate the political process, protect civilians, assist in the disarmament, demobilization and reintegration of former combatants; support the organization of elections, protect and promote human rights and assist in restoring the rule of law. Success is never guaranteed, because UN Peacekeeping almost by definition goes to the most physically and politically difficult environments. Peacekeeping has always been highly dynamic and has evolved in the face of new challenges. As for Malaysia, it will continue to support and actively participate in UN Peacekeeping Operations. Currently, Malaysia is involved in UN Peacekeeping Operations in the Democratic Republic of Congo (MONUSCO), UN Interim Force in Lebanon (UNIFIL), UN Mission in Liberia (UNMIL), UN Mission in the Republic of South Sudan (UNMISS), UN-African Union Hybrid Mission in Darfur (UNAMID), UN Interim Security Force for Abyei (UNISFA) and Western Sahara (United Nations Mission for the Referendum in Western Sahara - MINURSO). Malaysia has also sent a medical team as part of NATO's operations in Afghanistan. In addition, Malaysia through the Malaysian Peacekeeping Centre (MPC) is committed to provide training and capacity building on multi-dimensional peacekeeping for international military, police and civilian personnel who will be embarking on UN peacekeeping missions in conflict areas around the world.*

**Keywords:** *Human Rights, Peacekeeping, Peacebuilding, Peace Operations, United Nations (UN), Security Council,*

### INTRODUCTION

Since its establishment in 1945, the maintenance of world peace and security formed the United Nations (UN)'s main agenda. Over the last 75 years, the UN has been instrumental in bringing sustainable peace to majority of countries that entangled in conflicts. United Nations Truce Supervision Organisation (UNTSO) was the first ever peacekeeping operation established by the UN in 1948 at the Middle East whereby saw the deployment of Military Observers. Subsequently, UN's peacekeeping operation with troops being deployed began in 1956 (UN Emergency Force/ UNEF) when the Suez Canal was about to be nationalized by Egypt. UNEF was formed with the mandates to secure a ceasefire, supervise the withdrawal of foreign troops, observe the armistice agreement and patrol the armistice line (White 1993). While previous missions were established after a ceasefire was implemented, UNEF was given the power to secure the event, though no mandate was given for the ceasefire to be enforced. The most important development, was perhaps the involvement of the Secretary General in establishing the force, compared to previous missions which were formed by the General Assembly. Since then, nearly every peacekeeping missions would directly involve the Secretary General and Security Council. It was UNEF also that served as the basis of what is known as Classical Peacekeeping (Lake 2002).



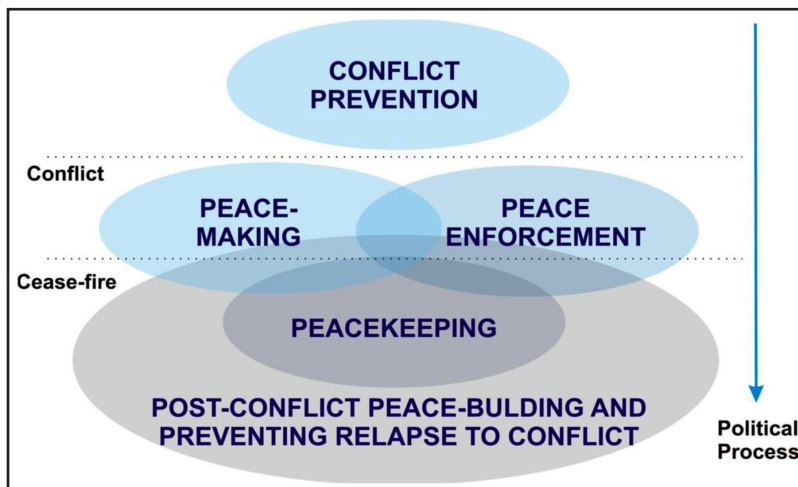
However, Classical Peacekeeping (evident throughout the Cold War era), works on several characteristics of operational conditions. They have consent and cooperation of parties, international backing, UN Command Control, a multi-national composition of UN force, no use of force, military neutrality and political impartiality (UN 1994). During the Cold War, most of the peacekeeping missions consisted of a very basic formula that followed four steps. Firstly, it was the negotiation of a ceasefire, followed by the separation of conflicting forces before the establishment of a buffer zone and finally, the monitoring of every side until a solution is found. Successful missions, exemplifying the Classical peacekeeping characteristics, during the Cold War era were the UN Peacekeeping Force in Cyprus (UNFICYP) in March 1964 and the UN Disengagement and Observation Force (UNDOF) in the Syria/Israel border in October 1973. With the end of the Cold War, peacekeeping operations also underwent significant changes and taking a different direction. The number of missions and the budgets for such missions had also increased significantly. Such changes took place mainly due to the changing geo-political landscape, as well as the changed policy towards peacekeeping, led by the Secretary General, Boutros Boutros- Ghali and his *Agenda for Peace*.

Comparatively, peacekeeping missions during the Cold war era were simpler; the world was largely split into pro-US (capitalist) bloc, or pro-Soviet (communist) bloc. Conflicts tended to fall into the categories of intra-bloc or inter-bloc. The choices were much simpler; any decision by the UNSC was vetoed by either the US or Soviet, and often the missions sanctioned were those that did not involve any of their interest. Other members of the UN also had no issues in supporting the missions politically and financially. Post-Cold War, there was a shift on the Soviet's side towards the west, and it had more inclination to cooperate with the US. Then, there was the issue of change in the number and types of conflicts. Protection of civilians became a priority in implementing the UNSC mandates. In addition, public pressure coaxed policy makers into taking account the humanitarian aspects involved in such conflicts. Thus, peacekeeping by the UN became a highly recognised service by the international community especially a confidence building factor was the success of the Gulf War. It was during this war that UNSC managed to authorize the use of force, bringing a new view of the combination of Classical Peacekeeping missions with aggressive peace enforcement (Jett 1999). Peace enforcement endorsed through Chapter VII of the charter was seen to be more effective against rogue belligerents who break the peace agreement.

## **FROM PEACEKEEPING TO PEACEBUILDING**

Doyle (1998) defines peacekeeping as a “*military and civilian deployment for the sake of establishing a United Nations presence in the field, [...] with the consent of all parties concerned*” whereas Kabosha (2015), describes peacekeeping as “*the use of both military and other agencies to respond to countries affected by wars and crises*”. Hence, peacekeeping is significantly a tool that can be used by the international community when human rights violations take place. Initially, peacekeeping had a few aims. Firstly, it focused in the containment of violence and its prevention from escalating into a war. Secondly, it was an approach by which the intensity and geographical spread of war was limited as soon as it occurred. Thirdly, it worked in consolidating ceasefire and creating the necessary space for the conflict area to be reconstructed (peacebuilding efforts) following the end of the conflict (Ramsbotham 2005). Accordingly, these aims were reflected in a number of peacekeeping operations, which had been documented by Raven-Roberts where he identified how between its initial formation and 1989, 15 such operations had been implemented (Raven 2005).

The turning point for UN's peacekeeping came in 1992, when Secretary General Boutros-Ghali presented his 'Agenda For Peace' where he describes Peacekeeping as *"a technique that expands the possibilities for both the prevention of conflict and the making of peace"*. While Peacemaking as *"any action that is undertaken with the purpose of bringing hostile parties to agreement through the peaceful means outlined in Chapter VI of the UN Charter"* and Peacebuilding as an action *"undertaken with the specific intent of strengthening and solidifying peace and order between adversaries. Such efforts were also designed to keep former combatants from relapsing into combat"* (Boutros-Ghali 1992). It outlined four new components, namely Preventative Diplomacy, Peacemaking or Peace Enforcement, Peacekeeping and Peacebuilding (Figure 1). Here, it can be seen that UN's peacekeeping undertaking has included a more comprehensive reach for peace and retaining it; becoming more reactionary than simply responsive. It is perhaps the biggest contribution by the small book; the outline of three other specific roles that any peacekeeping mission would need to employ. In addition to peacemaking and peacebuilding, the UN would also deploy its peacekeepers in conflicts with magnitude in size and impact, in the attempt to prevent conflict and make peace as more viable options (Boutros-Ghali 1992).



**Figure 1: Spectrum of Peace Activities (UN 2008)**

With a level of involvement more active than before, the peacekeeping operations has also grown tremendously; with changes in the missions' character, role and constituencies. Instead of the Classical peacekeeping's single-mandate, the newer facade of operations began taking on more tasks and actors, which became multilateral, multidimensional and multicultural characteristically. Where troops previously came from Europe and America for example, the Second Generation peacekeeping began more actively deploying troops from other regions, such as Asia and Africa becoming as biggest troop contributing regions. The roles of the peacekeepers were no longer limited to the monitoring of ceasefire for example. Instead, the spectrum of their responsibilities expanded to include others like helping to implement peace agreements which were complex, stabilizing the security situation, re-organizing the military and police to ensure reforms to security sector, electing new governments to bring legitimacy, as well as building democratic institutions establishing rule of law. All of these were among the aspects of the peacebuilding element. In addition, the tasks also encompassed the building of sustainable government institutions, monitoring human rights adherence, disarmament of weapons, empowering women through gender agendas as well as demobilizing and reintegrating former combatants back into the society.

Accordingly, the peacebuilding aspect seemed to have been integrated with the peacekeeping missions; it was never just about ending a conflict. Instead, it was also about securing the conflict had little to no chance of reigniting, through a secured and stable governance, where social and human rights were respected, and the conditions were conducive enough to encourage economic activities that can lead to prosperity and stability. Thus, the Second Generation peacekeeping teams were no longer limited to the military element. Others were brought in, including administrators, economic experts, police personnel, legal experts, de-miners, electoral monitors, human rights observers, specialists in civil affair and governance, humanitarian workers, as well as experts in communication and public information (UN 2020). With the evolution of peacekeeping to encompass operations of more dynamic and multi-spectrum nature, the Second Generation peacekeeping sought to *impose a specific – normally liberal – order in the territory where they are located* (Richmond 2004).

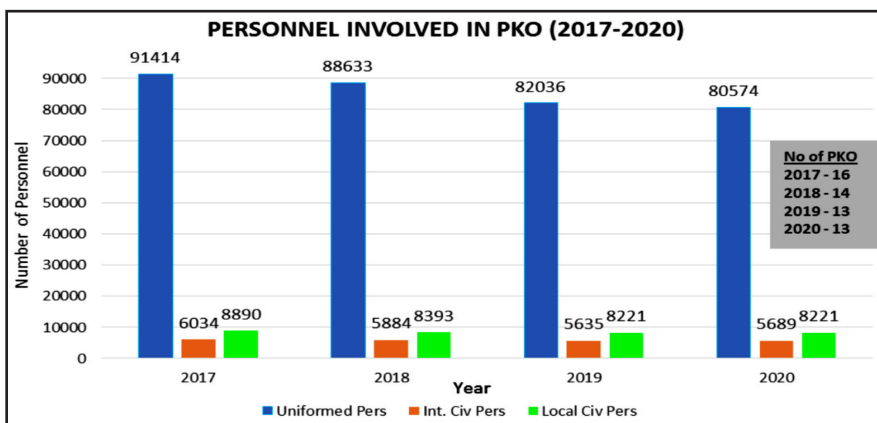
UN's peace operation has since received a review, where the organisation's expansion role which encompassed dispute settlement, peacekeeping, peace building, and enforcement action, was reassessed. As a result, the Report of the Panel on United Nations Peace Operations, later known as the BRAHIMI Report 2000, identified the effectiveness of the operations thus far, and how these operations could be consolidated and strengthened. In order to accommodate the expanding role of the operations, a number of recommendations were forwarded, to increase UN's capacity. This included the maintenance of *"brigade-size forces of 5,000 troops that would be ready to deploy in 30 to 90 days"* (UN 2020), as well as military professionals stationed at the UN headquarters. Following the review and as missions grew in complexity, operation designers had to exert their expertise in not only designing, but also executing the missions. Subsequently 10 years later, in May 2010, began UN Peacekeeping's period of consolidation, with troops reduced such as in UN Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO), and withdrawn UN Missions in the Central African Republic and Chad (MINURCAT). There are still currently no less than 110,000 military, police and civilian staff presently serving in 14 peacekeeping missions. In October 2014, a High-level Independent Panel on UN Peace Operations was established by the Secretary-General. Their objective was to comprehensively assess the condition of UN peace operations, and its future requirements. This led to the June 2015 HIPPO report, forwarding vital recommendations to accommodate future changes and requirements of peace operations followed by the Secretary General's own report in September on the implementation of the recommendations.

Whatever reforms undertaken by the UN, peacekeeping still adheres to its three Universal Operational Conditions. This constitutes International Backing, UN Command and Control and Multinational Composition of UN Force, which has served as the foundation of any operation, despite the era. It is based on the fact that for any mission to succeed, it needs to be supported by the international community both politically and financially. At the same time, the UN itself must facilitate the missions by leading the command and control. This is particularly important because being the organization that is compiled of different nations, it must thus deploy soldiers of various participating countries. It would be unfair and inadequate if soldiers are only deployed from one member country. It is from these basic operational conditions, based on the missions executed during the Cold war era before being expanded and reviewed, that the current operational conditions are set.

The shift from Classical peacekeeping that acted more as a buffer towards a more comprehensive peace operation shows that peacekeeping is not the only step in ensuring the peace in areas of conflict. Instead, it is only the first step, and the peace intended would not move towards

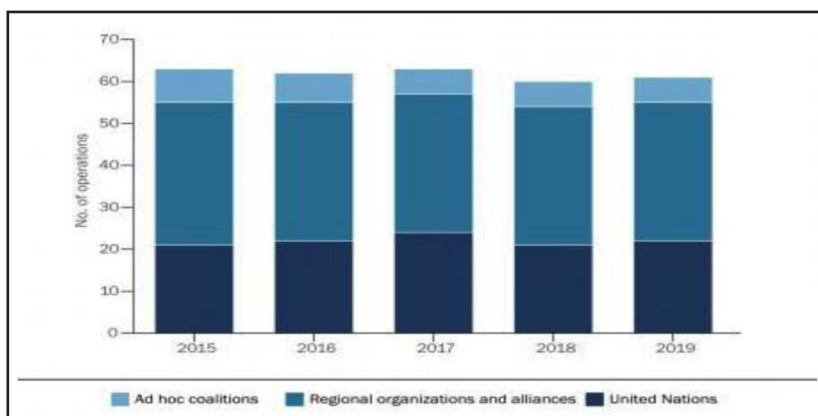
a more concrete conclusion if this step is not consolidated. Hence, UN's peace operation and its global mandate has undergone reforms that encompass *the achievement of democracy, post-conflict rehabilitation, justice and civilian protection* (De Waal 2009), which act as support. In the words of Bellamy, *"peace support operations are processes that support the establishment of liberal democracy in formerly war-torn societies. They are multifaceted, with significant numbers of both military and civilian components being built around broad and flexible understandings of consent, impartiality and the minimal use of force"* (Bellamy 2004). Thus, peacekeeping operations must be accepted as a mechanism for conflict resolution, forming as part of a general post-conflict reconstruction strategy, provided that the peacekeepers employ the correct timing and techniques. Mission mandates must then include concepts like peacekeeping and peacebuilding to socially reengineer "failed states" (Holt 2006). This is vital in adapting to the reality of "new wars" often characterized by unpredictable armed violence. What is taking place in the current scenario is very different compared to what happened decades ago, and without the necessary adaptation, peacekeeping will never be able to meet its objective and elevate effectiveness.

The initiatives and recommendations to UN peace operations have largely been based on the UN Charter itself, as well as Boutros-Ghali's Agenda for Peace; all share similar intention, which lies in the process of bringing peace to war-torn countries. Peacekeeping, along with the other elements including peacemaking, peace enforcement and peacebuilding are intended to address the problem at their roots, which often lie in the issue that cause social injustice. Measures taken ensure that all parties involved in the conflict are addressed; the combatants are disarmed, returned to and reintegrated back into the society (DDR), refugees and internally displaced persons (IDPs) are returned to their homes and the governance system is back in motion. This also encompasses elections, functions, reconciliation and political participation, and whereby economy is then generated by the creation of jobs. All of these share the same aim; so that 'peace achieved is peace ensured', and further conflict can be avoided. Chandler (2010) identifies that the underlying foundation of these measures is that "domestic sovereignty" is ensured. This would enable the factors that contribute to the violence to be tackled by the states, due to the fact that *"certain democratic principles are considered integral for the creation of long-term sustainable conditions for peace"* (Richmond 2004). Another way conflicting states can be assisted, according to Paris (2002), is through proxy governance. Whatever the program is or the measures taken, it finally comes down to the experience, culture, identity and geopolitical locations of the receiving states. These measures must be tailored inside-out, meaning if they are to be accepted, the intervention must fuse the local perspectives with the global agenda; and this often serves as a problem. For the peace to be built, it takes the participation of various parties; from the international community to the local actors. Without such participation, there is inadequate human security. This would result in an inadequate condition which can help build peaceful relations, often leading to peace interjected by general hostilities; possibly leading to new violence erupting or old conflict re-generated (Lily 2002).



**Figure 2: Personnel Involved in PKO from 2017 until 2020 (UN 2020)**

With a large make-up of the forces involving uniformed personnel in Second Generation peacekeeping, there has been a steady increase in the number of civilian (Figure 2) being engaged as well reflecting the expanding role of the peace operation missions which is no longer limited towards acting as buffers for every party involved in the conflict to respect the ceasefire. It is moving towards a more comprehensive peace approach, through the construction of conducive settlement of conflict, as well as the re-building of the states impeded by conflict.



**Figure 3: Organizations Conducting Peace Operations from 2015-2019 (SIPRI 2020)**

However, it must also be noted that the UN is not the only body that conducts global peace operation (Figure 3). Between 2015 and 2019, it can be seen that there are other players included namely regional organization or alliance, as well as ad hoc coalitions. Though there is a slight fluctuation, UN peace operations remained smaller in number compared to those undertaken by regional organizations or alliance. This perhaps reflects the UN's peace operation capability, or the reality that regional players are more proactive in dealing with conflicts that take place in their own turfs in order to protect their interest regionally.

## DETERMINING THE SUCCESS OF UN PEACE OPERATION

In order to identify the success of a peace operation, success by itself has to be analysed and defined. Then, it has to be followed by a look at the both the long and short term results of

the operations. Ultimately, any peace operation must be based on the objective of terminating the conflict and setting the stage for lasting peace and development. NATO has pointed out that *“One of the success categorisations differentiates between success on a strategic level and success on an operational or even tactical level”*. The distinction brought the assumption that *“fulfilment of the operational goals is an urgent, but not a sufficient condition for success in the strategic or even political sense”* (Garb 2018). Johansen (1994) meanwhile added that *“scholars and journalists should no longer measure peacekeeping against an ideal state of peace (for example, no armed conflict after deployment) or against an ideal form of conflict resolution (for example, settlement of long-standing animosities). To do so is normatively unfair and scientifically unproductive”*. He suggested that *“to find the utility of peacekeeping, we should (1) assess the effect of peacekeeping forces on local people affected by their work, and (2) compare the degree of misunderstanding, tension, or violence in the presence of UN peacekeepers to the estimated results of balance-of-power activity without peacekeeping”*.

Determining whether UN peace operations have been successful or otherwise is not simple; it differs between contexts. Over the years, UN's peacekeeping operation in Sierra Leone (UNAMSIL) has often been cited as a successful example. The mission, conflict between 1999 and 2005, had the objective of establishing peace in the civil war-torn country, during and after it ended based on three main objectives; assisting the disarmament, enforcing the terms of the Lome Peace Agreement and setting up a court where those accused of crimes against humanity, war crimes and violations of both international humanitarian law and domestic laws were tried. The mission achieved all the intended objectives timely. Moreover, the mission itself reflected the peace operation's shift from Classical Peacekeeping to Second Generation Peacekeeping. It is unfortunate that UNAMSIL success story could not be repeated in a few other conflicts; they do not reflect the overall statistics, yet they do present a big question on the effectiveness of these peace operations. In Europe, failure was clearly highlighted during the Bosnian War between 1992 and 1995. Although, UN peacekeepers from the Netherlands were deployed, the Srebrenica Massacre saw 8,000 boys and men of Muslim background killed. It was said to be *“the worst massacre to have taken place in Europe since the end of the Second World War”* (Traynor 2010). Whilst in Africa, UN's Assistance Mission for Rwanda/UNAMIR failed to stop the genocide in 1994 which took the lives of between 500,000 and 1,000,000 people. Whereas, in 1995 the UN Assistance Mission in Somalia (UNSOM) had to withdraw when the conflict deteriorated although, the Somali Civil War continues until today. More devastating was how in 2015, reports came forth, regarding the sexual abuse of children by UN peacekeepers in the Central African Republic; one which former Secretary General Ban Ki Moon described as *“cancer in our system”*. Despite his pledge to look into the issue, it drew an appalling view from the US (one of the UN peace operations' largest funder) that described it as *“great deal of horror, outrage and a sense of collective failure”* (The Guardian 2015). Herein lies the grim reality of the UN's success and failure; it is a collective achievement.

In her work, *Does Peacekeeping Work?* Fortna (2008) made a connection between civil war and the outcomes of peacekeeping whereby the success of peacekeeping can be determined by a period of continued peace, but *“on average peacekeeping missions have a lower success rate”*. This happens because of what is known as a selection effect; both the decision to intervene and the onset of conflict being not random insinuating that there is an inclination for peacekeeping missions to *“intervene in the most challenging and difficult conflicts”*. However, if these factors are controlled, there is an 80% chance that deploying peacekeepers to area of conflicts can prevent it from escalating into a civil war. In other word, much of the UN peace operations failure is caused



by the decision to intervene only when the situation has seriously worsened, instead of nipping it at the bud.

So does peacekeeping actually keep peace? Fortna (2008) establishes that peacekeeping missions may work better if more efforts are put in containing the conflicts at the early stage, instead of randomly picking conflicts which have escalated so much. It can be compared to medicine; the worse the sickness, the stronger the medicine that has to be taken. This tends to have an adverse effect, compared to treating the disease at the early stage. Often, these peace operations are conducted in more difficult cases, instead of the places where a decisive outcome can have been achieved. It poses an issue; the missions often attempt to *“try to maintain peace where both sides have the capacity to disrupt it”* (Fortna 2008). Peacekeeping is also not inclined to be conducted in places of conflict where the combatants have agreed to work towards peace. Thus, identifying whether the peace operations are effective or otherwise is rather difficult against such background.

If the factors that contribute towards the escalation of conflicts can be controlled, it is much easier to see how the international community's interference with these conflicts has actually helped in maintaining world peace. This is particularly true given the post-Cold War period, where the nature of conflicts has taken such a hostile and domestic turn. In the face of civil wars, the presence of peacekeepers may not provide all the solutions needed, but nevertheless, it helps in ensuring at least in some cases, peace is restored, and ends longer than without any intervention at all. Despite the failure of a number of missions, which ended up in fiascos, particularly in the 1990s, peacekeeping remains an effective tool with which conflicts can be managed – to a certain degree. Without it, there would have been more a higher tendency for these conflict in war torn countries to go back to their previous perilous conditions (Fortna 2004). Having stated the facts above, I personally believe the will of the people in conflict is the main contributing factor for any successful peacekeeping mission. If the population focuses its efforts of ensuring the adherence of the peace accord and the establishment of normalcy to the society then that country is heading for a quicker peace attainment overall.

## STRENGTHS AND WEAKNESSES

One of the notable strengths of peacekeeping is the ability to promote peace where it has attained remarkable achievements over past 70 years. Its ability to resolve conflicts while promoting human rights and efforts in peace building by bringing long term peace has also been lauded. In recognising the peacekeeping efforts, the Noble Peace Prize was presented to the UN in 1988. Besides that, the UN is strong because of its Security Council, and the effective leadership of its Secretary General, who holds the responsibility of ensuring that the Security Council resolutions are complied with in fully using the best means possible. Conversely, UN peacekeeping itself, theoretically, possesses its own strength which should be contributing to make its missions successful. With major powers being permanent members of the UNSC, there should have been more allocation of resources for the missions (Hobsbawm 1998). With these powers' existence in the Security Council's structure comes with the intention of ensuring that *“any resolutions would be enforced with a minimum of difficulty”* (Palmowski 2008). Another of the UN's strength is its state centric outlook; such perspective *“could be used to persuade all countries to co-operate with each other with regard to all peacekeeping operations”* (Griffiths 2008), in addition to the UN's impartiality and non-interference of the internal affairs of its member states (Hurd 1997). These strengths are tied closely as the peacekeeping's own strengths.

However, experts like Mearsheimer (2014) has pointed out the peacekeeping's own weaknesses. One of them was the veto intervention by the Soviet and the US in the days of the Cold War (Klein 2007). Each power had their own allies, which they used to intervene and bypass the UN's decisions that did not sit well with them (Hobsbawm 1994). This has not ended with the Cold War. In fact, in the recent time, major powers have used their position to veto the decisions and resolutions decided by the UN (Meyer 2005) a case in point is in Syria where mission establishment was vetoed. This has projected the image of the UN as being imperial rather than impartial, because its peacekeeping missions can be stopped by its own permanent members. Such domination by certain member states is a reflection that only exhibits the UN's weakness (Mearsheimer 2014) because it illustrates that the realistic chance of the peacekeeping missions being successful depends on the US' support for such operations.

Hence, it is not surprising that the UN is accused of imperialism; its intervention only takes place when the US has interest in the missions (Klein 2007). The impartiality is also reflected by the UN's disinterest in enforcing certain resolutions, like in the case of the Muslims against Israel (Fisk 2006). Another of UN's weakness is its interference in the member states' internal affairs (Mearsheimer 2014), which influences its stance on collective security and peacekeeping. Such weakness gets increasingly clear as exhibited by the increasing number of civil wars and collapsing states, particularly after the Cold War (Hobsbawm 1994). These conflicts were extremely hard to resolve, leading the mixed results; some of them were total failures and became totally abandoned, while others were taken over by NATO. However, it is not surprising then when the invasion of Iraq opened a new enthusiasm for peacekeeping missions, with the UN completing a number of successful missions, like in Angola and East Timor. It would be just what such countries hoped for; UN's intervention into ending a conflict peacefully, though it is the fire powers brought by the US supported by allies such as NATO that led to the ending of the conflicts rather than the presence of the UN forces, such as in Bosnia Herzegovina and Kosovo (Meyer 2005).

## **ISSUES AND CHALLENGES: THE CRISIS OF PEACEKEEPING**

The responsibilities of the peacekeepers are huge; they are not just deployed to stop a conflict. Instead, they are also tasked with rebuilding a conflict-torn society; transforming the violence back into peace, while at the same time facing the chaos which has evaded every previous solution. Over the years however, the tasks have not become any easier; in fact, they have taken an opposite turn. Peacekeepers in the contemporary context face multiple issues and challenges that demands a very robust posture towards peacekeeping efforts at tactical level ever though the mission is under Chapter VI deployment. To begin with, peacekeepers are expected to execute their responsibilities often controlled by ruthless militias, abusive armies and corrupt officials, while at the same time equipped with inadequate infrastructure. While they are instructed by the UNSC to support the host government, they also face opposition from the rebels who think they are supporting their enemy. Then, there is the issue of limited resources. With great powers not having enough interest in the crises which the UN sends its peacekeepers to handle, the allocation for these operations is always far from adequate. Despite the hefty \$7 billion allocation, it actually represents no more than 0.5% of the global military spending, to be used for no less than a quarter of the overall global conflicts (Autesserre 2019). As a result, there is never an adequate ratio of peacekeepers in relation to the area of operation. For example, in Western Sahara, the ratio is one peacekeeper for a 400 square mile area of operation, while in Congo, it is one peacekeeper to a 50 square miles area of operation (Autesserre 2019).

Even those who are deployed are not always of quality. Because the UN depends on its member states to provide the peacekeepers, it takes a long time to gather the necessary strength to be sent to the conflict areas; countries are not so willing to be involved in conflicts they have no benefits in. Even the collected soldiers tend to come from developing countries; inadequately trained, paid and equipped. In addition, the commanders of these forces also need to report to the chain of their command back in their country bringing the notion of caveat that delays mission action plan whilst enhances danger to all, not just the UN leadership. With the expectation of bringing their own troops safely home, they often face the conflict of choosing to fulfil their mandates and avoiding the casualties of their own force. At the same time, some of these peacekeepers themselves are engaged in unlawful acts that bring harm to those they are supposed to assist; engaging in torture, being involved in sex trafficking rings and sexual abuse, as well as exploitations (Autesserre 2019). Among others, such issues arise because the peacekeepers' own interpretation of the mandates; which are vague since they are produced out of compromise.

In reality, even with the best troops provided by the best states can lead to failures in the peacekeeping efforts. Among the biggest factor to this is the strategic choices often taken by the UN; taking a top down approach in stopping the violence by working with national elites and pushing for quick elections in consolidating the peace. Victory is often declared after a national vote is organized, usually following large, costly conferences with the aim of orchestrating agreements between the governments and the rebel leaders. In both situations, the basis are faulty assumptions. With a top-down approach, the fault lies in the fact that warfare does not only involve national or international competition. It also involves local competition. This may involve struggles over issues as simple as land, water, livestock, and low-level traditional and administrative power. And where elections are concerned, the push towards voting at a premature time is not exactly beneficial. In fact, it may even lead to the conflict resuming between the ruling party and the main rebel group. Congo for example, exhibits both of these mistakes, and becoming "*the world's deadliest conflict since World War II and the largest peacekeeping mission in the world*" (Autesserre 2019). Adding to the issues is the UN's preference of subject-area experience over country expertise. Most management positions are not localised as it is allocated to foreigners who are not influenced and well-versed with the host countries' societies, cultures, institutions, and even languages. As such they often fail to understand the real situation on the ground, and instead hold to the simplistic view of the conflicts, leading to a one-size-fits-all solution approach instead of customising it according to the real situation.

## **MOVING FORWARD**

Generally, UN peace operations nowadays no longer totally depend on what is called traditional coercive contingents (Fortna 2007). A combination of troops, police and observers is now supplemented by civilian components, encompassing the dynamics of both international and local civilians and volunteers from the UN itself. In addition, the involvement of women has also given positive impacts especially in promoting greater attention to gender perspectives in the peace and security endeavours of the UN. This helps the peace operations to expand their reach towards a larger group of targets, as well as curb the potential violation of human rights that could possibly take place under the watch of the peacekeepers, or committed by them. Such check and balance provided by the complementing and supplementing element increases the peace operations' credibility and effectiveness, while addressing a larger issue at hand vis a vis protecting the civilians, instead of just focusing on the armed conflicts alone.

Despite its weaknesses and whatever shortcomings it possesses, peacekeeping is still an effective tool in containing conflicts in war-torn countries. To some of the population, these peacekeepers are the only thing that separates them from the violence unleashed by national armies and rebel groups, though there are still some fierce objections by the local population against the presence of the peacekeeping forces. In addition, the tasks undertaken by the missions are unequal against any other alternative body or mechanism to re-establish peace in such countries as no one mission is the same as another. All missions have different factors and narratives in their baggage. In order to exert its role more effectively, UN peacekeeping should be tailored to the local context instead of taking the cookie-cutter or text book approach. Not all international best practices are suitable for the local context in the conflict areas. There are already examples of how such customization can work. The Idjwi Island in Lake Kivu in eastern Congo for example, was affected by the Congo war in 1996. Despite being surrounded by brunt of the conflict, and having the same excuses for the conflict to spread there, the small island managed to avoid the effects by setting up various grass-roots organizations. Religious networks, women's associations, youth groups and others contributed into resolving the disputes, preventing it from escalating. Their approach was also based on strong traditional belief, like the formation of blood pacts, where the different families held an oath of not hurting each other. This led to what was called a "*culture of peace*" (Autesserre 2019).

Unlike the UN's standard procedures which focused on billions of dollars' worth of aid or massive international interventions, building peace should take a different trajectory of empowering the average citizens instead. Accordingly, instead of viewing such bottom-up peace-building as unimportant, this should be an effective and vital complementary effort towards the top-down approach currently taken. Instead of pushing the factors that lead to the local disputes aside; no matter how trivial they may seem, they should be viewed along the broader issues to be addressed. The Financial aspect should be devoted to the conflict resolution and also ponder rebuilding efforts coordinated with other stakeholders at the local level as well. There should also be specialized forces or departments for bottom-up peacemaking at the headquarters and on the ground, stationed by experts who can analyse the conflicts at the grass-root level, who can later produce guidelines and organize training for their colleagues. Appropriately, UNSC needs to avoid taking a universal approach towards the handling of the conflicts, should they wish to make the efforts of the peace missions successful. Election is not the only way of securing the peace but more importantly it is to empower the local citizens so that they can avoid falling into the conflict itself. The local population should be made aware of the root causes of the violence, form their own conclusions about it, agree on the right solutions, and put them into practice. The peacekeepers are there to facilitate and help coordinate, not impose strange and foreign values that make the population feel they are colonized instead. The peace missions are there to help; not subject the population to an exertion of strength.

Such a model would then require the UN to increase its efforts in recruiting and training its staffs to have eloquent comprehension of the local contexts, as well as command of the local languages. Expertise in analysis alone would not be enough; it needs more at the practical level. Preferences and priorities should be given to local talents, and foreigners are brought in only when there are no local experts available, or there is a possibility that the local warlords may victimize the appointed local staffs. From one point of view, this would even make the peacekeeping missions' financial spending more effective and efficient. Instead of paying extra for foreigners and their involvement, the money could be better spent to empower the locals. Whatever models drawn up, it must be with the intention to include and consider the locals, instead of providing jobs for foreigners.

Currently, in the context of conflict areas, the decisions are often made by foreign peacekeepers and diplomats. But, it is the local citizens who would live with the consequences of the decisions taken. This should change. It should be locals who decide. The elections should be done only after the other factors are considered, such as poverty that may be the real reason behind the conflict. There is no point of having an election as the benchmark for peacekeeping missions, only to have the conflict back in escalation afterward. It should only be an option only if it can guarantee the return of peace instead.

## CONCLUSION

The UN was formed with an ideal world of peace and security. Peace operations were fundamental in their character, and of the operations conducted during the period of the Cold War, it was easier to identify which one was successful and which one was otherwise. However, with the end of the Cold War and the shifting geopolitical scenario, peace operations underwent a review. Where the use of force was not permitted previously, it was authorized then; a requirement, given the rising intensity of conflicts. With the ever changing scenarios, the peace operations have also evolved, to not only encompass peacekeeping as the central activity, but also peace building as one of its supplementing and complementing element. It is no longer just about ensuring the conflicts stop, but also the reconstruction of the states affected by the conflicts, returning life to a sense of normalcy. The peace operations may have their setbacks and issues, but it cannot be denied that without them, the world would have been more implicated by conflicts. Though there is an increase of civil conflicts, it has to be noted that these conflicts lead to other issues in the neighbouring states, as well as the region. The effects will not stop at the conflict-torn states' borders alone. Thus, the only way forward is for these operations to be reviewed and improved endlessly, to ensure they fulfil their objective of ensuring peace in war-torn states. The final take away is a quote from HE Mr Ban Ki Moon “ *The UN's impartiality allows it to negotiate and operate in some of the toughest places in the world. Time and again, studies have shown that UN peacekeeping is far more effective and done with less money than what any government can do on its own*”.

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## **PHARMACY PRACTICE DURING FIRST SIX MONTHS OF THE COVID-19 PANDEMIC IN MALAYSIA: PERSPECTIVE OF A MILITARY PHARMACIST FROM TUANKU MIZAN ARMED FORCES HOSPITAL**

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### **ABSTRACT**

*Pharmacy practice is the discipline concerning the roles of pharmacists in the healthcare setting. Healthcare in Malaysia encompasses numerous sectors where pharmacists serve, such as academics, community, enforcement, hospital, industrial, jurisprudence, military, regulatory and research and development. In addressing the crisis brought on by the COVID-19 pandemic, pharmacists and technicians have been highly involved in the delivery of healthcare services. Malaysia has a distinct two-tier healthcare system, and within this context, it is essential to integrate services during a crisis to maximize the available but limited medical resources. Often, the focus is on realistic and logical public-private partnerships. However, integrating different ministries offering healthcare facilities is also important, and inter-agency pharmacy practice coordination must be optimized. The Malaysian Armed Forces Health Services can be primed to enhance the nation's healthcare capacity and capability. As the COVID-19 pandemic continues to grip the nation and cause an unprecedented number of Malaysians to become ill, pharmacists must be resilient in leading, adapting and integrating well-rounded strategies in their respective fields to ensure good pharmacy practice across the health care continuum.*

**Keywords:** *Pharmacy Practice, COVID-19, Military Hospital, Malaysia, Public Health, Front Liner*

### **PUBLIC HEALTH PHARMACY PRACTICE IN MALAYSIA**

Public health is the science of protecting and improving the health of the people and their communities (Childress et al., 2002). This is achieved by researching, detecting, preventing and responding to diseases (*The Health Belief Model and Preventive Health Behavior - Irwin M. Rosenstock, 1974, n.d.*). Public health is part of the people's welfare. The barriers to a good public health framework include poor access to healthcare services, which may further be categorized systematically into man, machine, material, method, and money. The dominant aspect of healthcare services is the provision of efficient and effective pharmaceutical support in which the pharmacy team plays a pivotal role. Pharmacy practice is the discipline concerning the roles of pharmacists in the healthcare setting. Meanwhile, the healthcare system in Malaysia encompasses numerous sectors, such as academics, community, enforcement, hospital, industrial, jurisprudence, military, regulatory and research & development (R&D). Pharmacists are very much involved in all sectors. However, their potential benefit via skills is yet to be maximized in Malaysia compared to other nations.

### **HOSPITAL PHARMACY PRACTICE DURING USUAL TIMES IN MALAYSIA**

Malaysia's existing healthcare system consists of a two-tier public-private system. The private system mainly caters to the urban population and those who have the means to pay for their healthcare services. The public system provides access to everyone with token payments being imposed (Azmi et al., 2019). Government-managed healthcare facilities are under the supervision

of the Ministry of Health (MOH), the Ministry of Higher Education (MOHE) or the Ministry of Defence (MOD). Regardless of whether a system is public or private, pharmacists and pharmacy technicians are vital in providing patient-centred care in hospital complexes. Generally, in a hospital, the pharmacy department may be further divided into three major divisions: the in-patient pharmacy, the out-patient pharmacy, and the medical store. The services provided by each division vary.

The principal role of the in-patient pharmacy is to supply medications to warded patients (also known as drug distribution activities) via multiple mechanisms, such as the unit dose system (UDS) and ward floor stock. Other specific in-patient care services provided are clinical pharmaceutical care, pharmacokinetics (also known as therapeutic drug monitoring or TDM), parenteral nutrition (PN), cytotoxic drug reconstitution (CDR), drug information services (DIS), extemporaneous preparations and galenical preparations (*Pharmacy Practice in Malaysia - Hassali - 2014 - Journal of Pharmacy Practice and Research - Wiley Online Library*, n.d.). The principal role of the out-patient pharmacy is to dispense medications to discharged in-patients or to out-patients who consult a doctor at the hospital clinics. This objective may be achieved by multiple mechanisms. The main mechanism involves requiring the patients to physically come and collect their medications monthly. The pharmacy appointment duration may differ according to the specific hospital, as this depends on the stock of the medications provided to the patients during each visit. There are also multiple value-added service (VAS) mechanisms offered to refill prescription medications. Various forms of VAS, such as medications postal/courier services, automated dispensing units and drive-through pharmacies, are offered to minimize the number of people going to pharmacies, thereby reducing patients' waiting time at such places. The VAS alternatives offered by a hospital to its patients may differ according to the facility's suitability and the patients' medications. For instance, not all medications can be delivered by courier services, especially cold-chain and liquid dosage medications. Another example of a specific patient care service provided in this setting is the medication therapy adherence clinic (MTAC). Furthermore, both in-patient and out-patient pharmacies provide medication counselling. Medication counselling is a huge aspect of pharmacotherapy and encompasses all aspects of a medication review or reconciliation session.

Meanwhile, the main role of the DIS is to support clinical pharmacy services by responding to queries from healthcare providers and the public, developing guidelines, conducting pharmacy and therapeutic committee activities, involvement in the coordination of audits, educational activities, supporting publications, performing studies and reporting adverse drug reactions (ADR) or medication errors (ME), and performing drug use evaluations (DUEs) and drug use reviews (DURs) of medications in the hospital formulary or medication samples (i.e., investigatory drug control). The principal role of the medical store is to oversee the supply chain management (SCM) of the hospital's pharmaceutical and medical logistics (PharmaMedLog). This encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all healthcare-related logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can include suppliers, intermediaries, third party service providers and customers (Moniruzzaman, n.d.). In essence, SCM integrates supply and demand management within and across hospital systems.

## **HOSPITAL PHARMACY PRACTICE DURING A CRISIS IN MALAYSIA**

In December 2019, a novel coronavirus (severe acute respiratory syndrome coronavirus-2 or SARS-CoV-2) has caused an outbreak of the novel corona virus disease 2019 (COVID-19), starting in Wuhan, China, and spreading quickly to the rest of the Mainland and to over 190

countries worldwide (*Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and Coronavirus Disease-2019 (COVID-19): The Epidemic and the Challenges - PubMed*, n.d.). As of March 2020, more than 700,000 confirmed cases of COVID-19 and 30,000 related deaths had been reported worldwide. As of February 2021, more than 111,000,000 confirmed cases of COVID-19 and 2,400,000 related deaths had been reported worldwide. Europe and the USA have since replaced China as the epicentre of the disease, with several countries (including Italy, Spain, and Germany) reporting rapidly growing cases.

During the COVID-19 pandemic, the war analogy of ‘front liners’ is being used to represent assistant medical officers, doctors (regardless of whether they function as housemen, medical officers, specialists, registrars, or consultants), lab technicians and nurses. There are some instances wherein the commitment of the pharmacists and pharmacy technicians is overlooked. However, it must be emphasised that pharmacists and pharmacy technicians are very much involved from the beginning to end in the delivery of healthcare services during the COVID-19 crisis. They function behind the scenes regardless from the community to the hospital levels.

### **CUSTOMIZING HEALTHCARE SERVICES ACCORDING TO THE CRISIS WHILST MAXIMIZING THE IMPACT OF AVAILABLE RESOURCES**

Healthcare services for the management of COVID-19 begin at the medical store of the hospital. Here, the PharmaMedLog pharmacist on duty ensures the procurement of protective gears as a defence mechanism to safeguard healthcare workers involved directly and indirectly in managing the crisis. The items may include assets, such as non-contact infrared (IR) forehead thermometer, battery powered air-purifying respirators, medical disposables, hand sanitisers and personal protective equipment (PPE). The forms of PPE include Tyvek suits, 3-ply surgical or medical masks (ear loop or tie on), respirator masks (medical or particulate), plastic aprons, surgical/isolation gowns, disposable gloves, leg covers, shoe covers, waterproof boots, face shield, goggles or eye-visors, head covers and medical cap. All of these are fast-moving items in the current scenario. Apart from the supply of these items, the PharmaMedLog pharmacist has to ensure that medications are available to treat positive COVID-19 cases and patients under investigation. As a foresight, it is essential to stock up on COVID-19 treatment drugs, including hydroxychloroquine (Plaquenil®), azithromycin (Zithromax®), oseltamivir (Tamiflu®), lopinavir/ritonavir (Kaletra®), favipiravir (Avigan®), remdesivir, tocilizumab (Actemra®) and interferon beta-1b (Betaferon®). Meanwhile, the PharmaMedLog procurement for non-COVID-19 cases continues routinely. The pharmacist managing the galenical services may also stock up on alcohol-based hand sanitisers. Mass self-production is done to address shortages, cater to increased demands and reduce costs.

The Malaysian government announced a Movement Control Order (MCO) for two weeks to be executed initially from March 18, 2020 to March 31, 2020. By May 2020, the MCO was extended and until June 6, 2020 (*The Prime Minister's Special Message on COVID-19 - 16 March 2020*, n.d.). Enhanced MCO was implemented in identified COVID-19 hot spots. Since this announcement, non-essential and non-urgency clinic appointments have been re-scheduled. This step guarantees minimal unnecessary patient traffic at hospitals to ensure that social distancing is being applied and healthcare human resources can be directed towards the management of COVID-19 cases. However, such a move has affected out-patients who are supposed to see their doctors or refill medications from the pharmacy during this period. In this case, good pharmacy practice has to be observed, as medication compliance is of utmost importance even during crisis to minimise the risk of patient hospitalisation. There should be no instance wherein patients must risk themselves to COVID-19 exposure just to get their medications; moreover, patients should not skip their medications doses due to insufficient supply. Recognising the risks, most out-patient

pharmacy teams throughout the country have taken strategic measures to make it easier for people to get their medications even during the pandemic.

The prescriptions received by out-patient pharmacy teams can be categorized into two: medication filling of a new prescription or medication refilling of an existing prescription. For essential cases, the doctor may still see the patient at a clinic and issue a new prescription. The outpatient-pharmacy team will fill this prescription according to the normal pathway wherein the patient is present physically. However, instead of the usual one- or two-month supply of medications, the patients are supplied with three months' worth of medications, thus limiting the number of trips that must be made. For non-essential cases with re-scheduled appointments, the doctor will do a tele-medicine session with the patient, write a prescription online and the clinic staff will send it to the pharmacy. The out-patient pharmacy team will then analyse the case during the screening of prescription. There will be two scenarios. If there are no changes in the patient's pharmacotherapy, then the medications will be supplied via VAS, and the patient will no longer be required to come to the pharmacy. If there are changes in the pharmacotherapy, then the prescription will be filled in advance, and the patient will be advised as to when he/she should visit the pharmacy for a scheduled medication counselling and collection session. This depends on a case-by-case basis rationalization by the pharmacy team. All patients who request for the medication refilling of an existing prescription are advised to use VAS, although they may still physically come to the pharmacy to collect their medications. The VAS is promoted through various channels, especially via social applications like WhatsApp and Facebook. Patients need not be present physically to request for these services. Instead, they may call the pharmacy and arrange for such services. However, in cases wherein patients must be physically present in the pharmacy, it is vital to ensure social distancing in the waiting area of the out-patient pharmacy to limit their potential exposure to other patients and even the staff. The seats and pharmacy floors are properly labelled to enforce social distancing. Patients are advised to avoid sitting and standing close to one another whilst maintaining a distance of at least 1 meter apart. They are also advised to maintain distance with the pharmacy team when handing in their prescription at the prescription screening counter and use the hand sanitizers provided at the prescription screening counters upfront. Information on COVID-19 and notices on the importance of hand hygiene are prominently displayed throughout the area. Safely refilling prescription medications during the COVID-19 pandemic takes some planning. All these strategies help to protect vulnerable patients from unnecessary risks whilst ensuring that they get the medications they need to stay healthy and out of the hospital.

Meanwhile, the in-patient pharmacy team in a non-COVID-19 treatment facility may face different challenges compared to the in-patient pharmacy team in a COVID-19 treatment facility. Although a hospital may not be treating COVID-19 cases, it should still have wards for quarantine cases. The in-patient pharmacy team must ensure that these additional wards are adequately supplied with the required medications via available mechanisms. It is quite challenging to perform the normal functioning of all ward drug distribution mechanisms whilst practicing greater caution to ensure minimal exposure between the ward team and pharmacy team. Normal work culture must be practiced cautiously. Contact caution is also advised for all pharmacists and technicians managing other services for in-patients. Moreover, the pharmacy team must take the necessary precautions for themselves. This includes disinfecting their working areas daily, using proper PPEs and taking hazard leaves on rotational basis to minimize contact. During this pandemic, the primary task of the DIS is to perform COVID-19 information dissemination to healthcare providers and patients. Sharing relevant and accurate information in a timely manner from a pharmacist's point of view is vital for the management of COVID-19.

## INTEGRATION OF PHARMACY PRACTICES BETWEEN THE MINISTRY OF HEALTH AND THE MINISTRY OF DEFENSE

Malaysia has a distinct healthcare system and integrating a wide range of related services during a crisis is essential in maximizing available but limited medical resources (*Economic Assessment of Malaysia 2016 - OECD*, n.d.). Often, the focus is on having a realistic and logical public–private partnership. However, integrating different ministries offering healthcare facilities (i.e., MOH, MOHE and MOD) is vital, and inter-agency pharmacy practice coordination must be optimized.

The Malaysian Armed Forces Health Services (MAFHS) can be primed to enhance the nation's healthcare capacity and capability via many means. For instance, in terms of mobilization of personnel to ensure continuity services. The MAFHS under the MOD are offered by the Royal Medical and Dental Corps (RMDC). The RMDC is categorised as a service support corps and serves in three branches: army, air force and navy. The RMDC has major and minor medical units. The major medical units are under the command of the MAF Head Quarters (MAFHQ), and the minor medical units are commanded by each service, respectively. The major medical units consist of the following: 91 Institute of Aviation Medicine, 92 Institute of Underwater and Hyperbaric Medicine, 93 AF Medical and Dental Depot, 94 Terendak AF Hospital, 95 Tuanku Mizan AF Hospital (TMAFH), 96 Lumut AF Hospital, 97 Gemas Army Hospital, 98 Wilayah Kota Kinabalu AF Hospital and one AF Health Training Institute in Terendak camp. The minor medical units consist of the AF medical battalions, AF sick quarters, AF medical centres and AF dental centres. The TMAFH is in Wangsa Maju, Kuala Lumpur. The TMAFH lab is designated as a COVID-19 detection and validation facility. Hence, the TMAFH assists the MOH by running samples from all Titiwangsa District healthcare facilities and occasionally from the National Public Health Laboratory, Sungai Buloh. The designated COVID-19 treatment facilities in Kuala Lumpur include the following: Hospital Kuala Lumpur (HKL), Hospital Sungai Buloh (HSB) and University Malaya Medical Centre (UMMC). Both HKL and HSB are under the jurisdiction of the MOH whilst the UMMC is under MOHE. The administrative teams of the HKL and TMAFH have come up with a consensus on integrating patient care. All patients who come to the TMAFH will have to undergo screening and testing via oropharyngeal/nasopharyngeal swabbing at its Emergency Department (ED). The stable and non-stable patients will be segregated and admitted to the respective quarantine wards pending the results. If a patient is positive, then he/she is transferred from the TMAFH to the HKL for treatment. If negative, the patient is treated in the TMAFH accordingly. Walk-in patients who arrive at the ED complaining of COVID-19 symptoms, such as fever, runny nose, and cough, are also subjected to the screening procedure. Patients who show signs and symptoms of influenza-like illness undergo swabbing and are then quarantined. They will be diagnosed as having severe acute respiratory infection/pneumonia to rule out COVID-19. With targeted testing, there is no basis to swab patients who do not meet the diagnosis criteria. Instead, the patient will be referred to the fever clinic set up in the ED. The patient will be managed accordingly and discharged with proper medications. Most of the patients who fall under this category are diagnosed as having an upper respiratory tract illness. Instead of collecting their medications from the ED pharmacy dispensary, the medications will be dispensed by a pharmacy technician on site. Reciprocally, non-COVID-19 HKL patients who need urgent treatment and care will be referred to the TMAFH for management according to specialty. This will enable the HKL team to focus on combating COVID-19 without jeopardizing other patients.

With the implementation of the MCO, pharmacy policies at the TMAFH are also loosened up. The out-patient pharmacy refills the prescription medications for follow-up patients who are under the MOH healthcare facilities but are unable to visit these clinics to refill their medications



due to valid reasons and are facing depletion of stock. This policy was finalised upon receiving a few requests from walk-in patients from various places, such as from Sintok Kedah, Temerloh Pahang and even from Papar Sabah, who have medical follow-up appointments. These patients were mostly visiting their families serving with the MOD or were in Kuala Lumpur for business purposes but were unable to return immediately. Their medications will be refilled if they can prove and re-confirm their prescriptions. If there are any queries or doubts about the patients' medications, further re-confirmation will be carried out with the medical team at their respective healthcare facilities.

## **PHARMACY PRACTICE DURING A CRISIS IN DEVELOPED NATIONS**

In many other countries, pharmacists are providing essential services to COVID-19 patients (*Pharmacy Groups Jointly Advocate for Expanding Pharmacists' Role During Pandemic*, n.d.). Although their practice setting may differ such as in community pharmacies, clinics, and hospitals. The complexity of diagnosing and treating COVID-19 patients in the hospital, post discharge or as an outpatient, requires a multidisciplinary team of experts which includes pharmacists. While patients and doctors may opt for telehealth, pharmacies remain open and provide opportunity for the patients to access a pharmacist as medication supply and counselling may require patient's physical presence. In some countries, the public and media often overlook pharmacist and technicians as essential front line health care providers during the COVID-19 pandemic. However, they are also equally appreciated and recognized in developed nations (Bauman, 2020). Pharmacists Ohio, United States of America worked with hospital senior leadership and the disaster preparedness team to identify and execute essential pharmacy services for COVID-19 inpatients and outpatients (*Leveraging Pharmacy Residents during COVID-19 Pandemic*, n.d.). Over 450 pharmacists, pharmacy technicians, residents, and student interns provided adapted traditional and novel essential (Goff et al., 2020). COVID-19 pharmacy services. Additional new pharmacy services were identified as the pandemic evolved (*COVID-19 Pandemic: Challenges and Solutions from the Cardiology Pharmacist's Perspective - Pickworth - 2020 - JACCP: &nbsp;JOURNAL OF THE AMERICAN COLLEGE OF CLINICAL PHARMACY - Wiley Online Library*, n.d.). For example, as our city prepared for a surge of COVID-19 patients, an entire pharmacy was set up in the convention center that was serving as a COVID-19 overflow hospital. An emergency medicine pharmacist was deployed to New York City to assist during their surge of COVID-19 patients. Pharmacists established a new ambulatory care COVID-19 clinic to assist in the management of COVID-19 patients post hospital discharge. The Centers for Disease Control and Prevention (CDC) encouraged the strategic use of Twitter to reach the public effectively and inexpensively with timely COVID-19 information. Twitter worked with the WHO, CDC, and academic institutions to identify experts to provide credible updates on the topic of COVID-19. The ID pharmacist applied and received Twitter's blue badge "verification status" letting people know that the account of public interest is authentic (*Twitter Prioritizes Blue-Check Verifications to Confirm Experts on COVID-19 and the Novel Coronavirus | TechCrunch*, n.d.).

Pharmacists in the United Kingdom (UK) have contributed to the strategic management of COVID-19 directly and indirectly. This has included leading on public health interventions, clinical and medicines supply management (national and local), as well as policy changes (*Standards for Registered Pharmacies | General Pharmaceutical Council*, n.d.). Examples of direct response have included leading work on the national medicines supply chain especially for critical care medicines for ventilated patients and anti-infectives, changes to Misuse of Drug Regulations, supporting easier access to medicines in hospices and care homes, measures to reduce health inequalities, lobbying government to effect policy change, and developing national training guidance to support pharmacist redeployment to critical care settings, surveillance of antimicrobial

use, and development and implementation of interventions to tackle antimicrobial resistance in the context of the COVID-19 pandemic. Pharmacists also provided leadership and oversight into new public health roles and interventions. Within hospitals, pharmacists were required to work outside their usual scope of practice including redeployment to intensive care units (ICU), managing COVID-19 clinical trials, upscaling sterile production units to compound and supply increased volumes of ready-to-administer parenteral medicines to reduce work for nurses wearing full PPE, as well as adapting medicine policies to ensure they are fit for use in the current pandemic climate. Community pharmacies remained open to the public providing reassurance and advice on medicines and illnesses at a time when other frontline health care staff moved to remote consultations. Most pharmacists across the country continued to maintain and contribute to their usual roles while taking on additional adapted or new roles for COVID-19 (Rutter & Ashiru-Oredope, n.d.). This includes providing vaccinations.

Australian pharmacists have been essential members of the COVID-19 multidisciplinary team response in both the hospital and community setting. During the public health response and implementation of Stage 4 restrictions in Melbourne, community pharmacies were considered an essential service. Pharmacists continued to facilitate medication supply and provide clinical care such as influenza vaccinations. Clinical pharmacists sit on the National COVID-19 Clinical Evidence Task force to develop national, evidence-based living guidelines for the clinical care of people with COVID-19 (Tong et al., 2020). A dynamic medication demand model was developed and used to project critical medication usage and availability across Australia and has been made available to government hospitals. Pharmacists were directly involved with the health service operational response including redesign of hospital COVID-specific wards and implementation of dedicated COVID-treating teams. Within a one-week period, the existing 7-day-a-week clinical pharmacy service to the ICU and General Medical Unit was expanded to a 24-hour service. Rapid adoption of technology, including virtual attendance on inpatient ward rounds limited to two medical staff, has enabled ongoing service provision while keeping both patients and pharmacists safe. Telehealth was implemented with pharmacists providing ongoing clinical reviews for rural and regional outpatients of existing statewide services including solid organ transplantation. Pharmacy students were recruited and trained in roles usually undertaken by pharmacy technicians in case of need. Pharmacy technicians and pharmacy students were teamed alongside nursing staff in COVID-specific wards to assist in medication supply and administration.

Prevention of transmission of COVID-19 was a key objective of pharmacists work in Canada. Pharmacists provided advice to health care stakeholders in Ontario and provincial government partners on safe medication use during the pandemic. This included recommendations to consolidate medication administration times to reduce the use of PPE and decrease exposure time to prevent transmission between patients and health care providers (*The Use of Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) in Patients with COVID-19*, n.d.). As another effort to prevent COVID-19 spread, pharmacists provided advice on the appropriate use of nebulizers, metered dose inhalers, non-steroidal anti-inflammatory drugs, and intranasal medications in patients with COVID-19. From an antimicrobial stewardship perspective, an interdisciplinary team co-led by pharmacists is performing rapid reviews and meta-analyses on bacterial co-infection and antibiotic prescribing in patients with COVID-19 to evaluate and mitigate the impact of COVID-19 on another global public health threat - antibiotic resistance. Patient educational resources were developed by pharmacists from various institutions along with patient advisors to address common myths regarding medications in COVID-19. Pharmacists and technicians modified the medication dispensing and administration process including the safe handling of returned medications. The pharmacy team also adapted the medication management system on the patient care units to reduce crowding and ensure adequate physical distancing at the automated dispensing cabinets. Given the

rapid changes to the medication supply chain during COVID-19, managing medication shortages and recommendation of alternative pharmacotherapeutic options was another key role. Pharmacists also educated hospital staff and physicians on prevention and management of COVID-19 by setting up a web forum to address common pharmacotherapy-related questions.

## **CONCLUSION: PHARMACISTS ROLE IN STRENGTHENING RESILLIENCE OF THE MALAYSIAN HEALTHCARE SYSTEM**

Based on the Registration of Pharmacist Act 1951, as of February 2021, there are 20,611 registered pharmacists in Malaysia (Buang et al., 2019). Indicating an approximately 1:1,553 ratio of pharmacist to Malaysian citizens. It is vital to note that 85% of World Health Organization (WHO) member states report to have less than one pharmacist per 1000 population. They are found practicing across different health care settings and are reported to be more accessible to the public. Pharmacists have an important role to play in health care more than just selling medicines at pharmacies. Pharmacists play an integral part in the health care team and assumes varied functions ranging from the procurement and supply of medicines to pharmaceutical care services, helping to ensure the best treatment for patients. The pharmaceutical care process involves establishing a relationship between the patient and the pharmacist, developing an evidence-based care plan for medicine therapy and follow-up on the patient's expected health outcome. Depending on the pharmacist's environment of practice, as medication experts their skill sets vary based on practice micro level and macro level.

As the COVID-19 pandemic continues to grip the nation and cause an unprecedented number of Malaysians to become ill, pharmacists must be resilient in leading, adapting and integrating well-rounded strategies in their respective fields to ensure good pharmacy practice across the health care continuum. Good pharmacy practice can be broken down into five main elements which are health promotion and ill-health prevention, supply and use of prescribed medicines & other health care products, self-care, influencing prescribing & medicines use and research & practice documentations. Pharmacy practice during the first six months of the COVID-19 pandemic has seen numerous changes in Malaysia. If pharmacy teams can continuously cope with the dynamic changes experienced during any crisis to ensure good pharmacy practice prevails, then they are able to the win hearts and minds of other healthcare providers and the public. Hence, establishing the omnipresence of the pharmacy profession in Malaysia. Decision makers of public health are encouraged to study pharmacy team's availability, role, function and to use them effectively for benefit of the nation in a health care crisis.

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## **FUTURE DESTINY OF THE SYRIAN REFUGEES CRISIS**

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### **ABSTRACT**

*The Crisis of the influx of Syrian Refugees is a tragedy to the history of modern humanity. Therefore, this article raises the question of how refugees can occur in Syria. The main objective of the article is to study the future situation of Syria. This article will describe what has happened to children in Syria throughout this Crisis. The biggest challenges facing the Syrian people will also be described in this article. The UN Refugees Agency (UNHCR) has also played a significant role in dealing with Syrian refugees. This article uses the concept of national security as a platform to see how Regional And International Organizations On Syrian Refugees play their role by implementing changes and improvements in national migration policy in line with international standards and at the same time safeguarding national interests. This article has found that the impact of the ever-increasing influx of Syrian refugees is indeed threatening the security of ASEAN countries, the European Union (EU) and the Organization Of Islamic Cooperation (OIC) in addition, it also has an impact on the economy, social harmony and the political stability of those countries. These countries play a role in how the future of the country of Syria if the number of refugees recorded is increasing day by day.*

**Keywords:** *Syrian Refugees, UN Refugees Agency (UNHCR), ASEAN countries, European Union (EU), Organization of Islamic Cooperation (OIC)*

### **WHAT HAPPENED IN SYRIA?**

Syria is a modern society built on the cradle of civilization. The Syrian Arab Republic, commonly known as Syria, is a Middle Eastern country located at the east end of the Mediterranean Sea, is one of the most ancient inhabited regions on Earth. The country was formerly known, with Egypt, as the United Arab Republic. It is known locally as Al Jumhuriyah al Arabiyah as Suriyah, the shortened form of this name is Suriyah. Syria is bordered on the north by Turkey, on the east by Iraq, on the south by Jordan and Israel, and on the west by Lebanon and the Mediterranean Sea. In 2001 the total land area of 184,050 square kilometres included 1,295 square kilometres of Israeli-occupied territory. Syria is home to one of the oldest civilizations in the world, with a rich artistic and cultural heritage. From its ancient roots to its recent political instability and the Syrian Civil War, the country has a complex and, at times, tumultuous history.

In 1970, Hafez al-Assad, the Syrian minister of defence, overthrew the de facto leader of Syria, Salah Jadid. He remained in power as president for 30 years until his death in 2000. Hafez al-Assad was part of the Islam Alawite, which is a minority Shiite sect. During his presidency, Hafez was credited with strengthening the Syrian military with the help of the Soviets. When



Hafez al-Assad died in 2000, his son Bashar became president at age 34. After Bashar took power, the constitution was amended to reduce the minimum age of the president from 40 to 34. In 2002, the United States accused Syria of acquiring weapons of mass destruction and listed the nation as a member of the so-called “axis of evil” countries. The Syrian government was also accused of being involved in the assassination of Rafic Hariri, the Lebanese prime minister, in 2005. After a few years of what seemed like potential diplomacy between Assad and other nations, the United States renewed sanctions against Syria in 2010, saying that the regime supported terrorist groups. Many human rights groups reported that Assad regularly tortured, imprisoned and killed political adversaries throughout his presidency. Revolts in Egypt and Tunisia, known as the “Arab Spring,” broke out in early 2011. The Syrian refugee crisis resulted from a March 2011 violent government crackdown on public demonstrations supporting a group of teenagers who were arrested and killed hundreds of protestors and their family members for anti-government graffiti incident and became widespread in the southern town of Daraa. The arrests sparked public demonstrations throughout Syria, which were violently suppressed by government security forces. The conflict quickly escalated, and the country descended into a civil war that forced millions of Syrian families out of their homes. Ten years later, the number of Syrian refugees has hardly declined, and more than 13 million people still need humanitarian.

As protests spread through Syria, they were countered by solid government crackdowns and increasing violence from both government forces and protesters. By the following year, Syria was embroiled in a civil war. The Syrian military opposed a growing number of militant groups. The conflict has torn apart the lives of millions of Syrian children and families as government forces and militant groups fight to take and rule territory, resulting in what is now known as the Syrian refugee crisis. The country’s weakened governance and the destruction of its social services and institutions make Syria a textbook case of a fragile state. By July 2011, rebels had formed the Free Syrian Army (FSA), and pockets of insurrection broke out. However, by 2012, Syria was engulfed in a full-blown civil war. Estimates vary, but according to the Syrian Observatory for Human Rights, at least 321,000 people have been killed since the start of the war or are missing. Hundreds of people were killed outside of Damascus in 2013 during a chemical weapons attack. The United States said the Syrian government carried out the assault, but the regime blamed rebel forces. What started as a war between the Assad and Syrian rebels became more complicated as the battle progressed. New forces, including the Islamic State (ISIS), joined the fight against the Syrian regime. In 2014, ISIS took over large areas of Iraq and Syria. Since that time, U.S led forces have strategically bombed ISIS targets throughout the region. The United States has stated their opposition to the Assad regime. However, it has been reluctant to get deeply involved in the war. Russia and Iran have declared themselves allies of the Syrian government. On April 7, 2017, the United States initiated its first direct military action against Assad’s forces after accusing them of carrying out another chemical weapons attack on civilians.

## **WHY THEY BECAME REFUGEES?**

The Syrian civil war has caused an international humanitarian crisis for the country’s civilians. According to World Vision’s nonprofit organization, more than 11 million Syrians, roughly half of the country’s population, have been displaced from their homes as of April 2017. Syrians are leaving their homes when life becomes unbearable. One of the top reasons they cite is violence. Since the Syrian civil war began, nearly 585,000 people have been killed, including more than 21,900 children, reports the Syrian Observatory for Human Rights. The war has become

deadlier since foreign powers joined the conflict. The safety of the people is not taken care of at all, and they are always in fear. There was no action from certain parties to prevent atrocities against the Syrian people until the people themselves were forced to become slaves and prisoners against the government. When these atrocities could not be curbed, this caused the people to have to flee to save themselves from the government's oppressive actions against its people.

One of the top reasons why they were leaving their homes is Collapsed infrastructure. Within Syria, only 53% of hospitals and 51% of healthcare facilities are fully functional, and more than 8 million people lack access to safe water. An estimated 2.4 million children are out of school. The conflict has shattered the economy, and more than 80% of the population lives in poverty. The lives and destinies of the people are not protected by the collapse of infrastructure in the country. This keeps the people in trouble and hunger because the government should channel no help. The other reason is children in danger and distress. Syrian children are the country's main hope for a better future because the younger generation is now the future leaders. Therefore, good education and excellent life teachings should be applied early, but the opposite happened. These children have lost loved ones, suffered injuries, lost school years, and experienced unspeakable violence and cruelty.

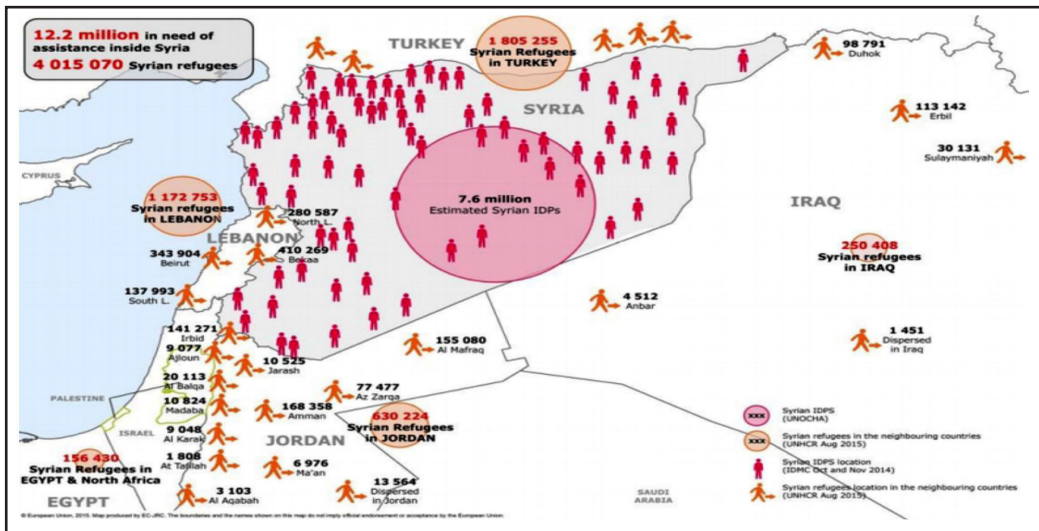


Figure 1: Respons Twelve Country about Syrian Refugees Crisis in 2015

## HOW IS THE SYRIAN CIVIL WAR AFFECTING CHILDREN?

Many Syrian children had never known a period when they were not surrounded by fighting. For millions of them, the battle has robbed them of their youth, affecting their long-term physical and emotional health, as well as their future possibilities. Many children have lost family members and friends due to the violence, have endured physical and psychological trauma, and have had to drop out of school. They have only known the crises their entire lives. Approximately 45 per cent of Syrian refugees in the region are under the age of 18, with more than a third without access to schooling. Children's rights are being violated regularly amid the Crisis. Child labour is becoming more common among Syrian children, with incidents in Lebanon nearly doubling in just one year.

Why is the Syrian civil war affecting children? This is because it is prone to disease and malnutrition. Children are prone to diseases caused by poor sanitation, including diarrheal diseases such as cholera. They may miss regular vaccinations and health check-ups, especially in separate areas. In poor housing, cold weather increases the risk of pneumonia and other respiratory infections. This puts their lives at risk of getting the disease at a young age when they should be given a perfect life and a good standard of health. Malnutrition is also one of the reasons they are vulnerable to any disease that endangers the health of Syrian children—next, Child workers and child soldiers. Despite significant progress since the Roman empire, forced labour is still used in Syria, especially among children. Many refugee children are forced to labour in order to help their families. They frequently work in hazardous or deteriorating situations for low compensation. Children were enlisted as warriors, human shields, and support personnel by the warring parties. After marriage and child abuse, Syrian children are more vulnerable to sexual abuse and exploitation in the unfamiliar and overcrowded conditions found in refugee camps and informal tent settlements. Without sufficient income to support their family and fear of their daughter being raped. Girls are at high risk of being raped, molested, and many more, making these Syrian children in fear. Therefore, parents have the right to marry their children at a young age to ensure the child's safety. The latter is the lack of educational opportunities. In Syria, the war reversed two decades of educational progress. One-third of the school-age population is out of school. Many schools do not have classrooms because they are damaged, destroyed, or inhabited by military groups or homeless people. So these children do not have the opportunity to study in school and expand their knowledge in education due to the turmoil that is taking place in Syria. The fate of the education of these children is not defended at all.

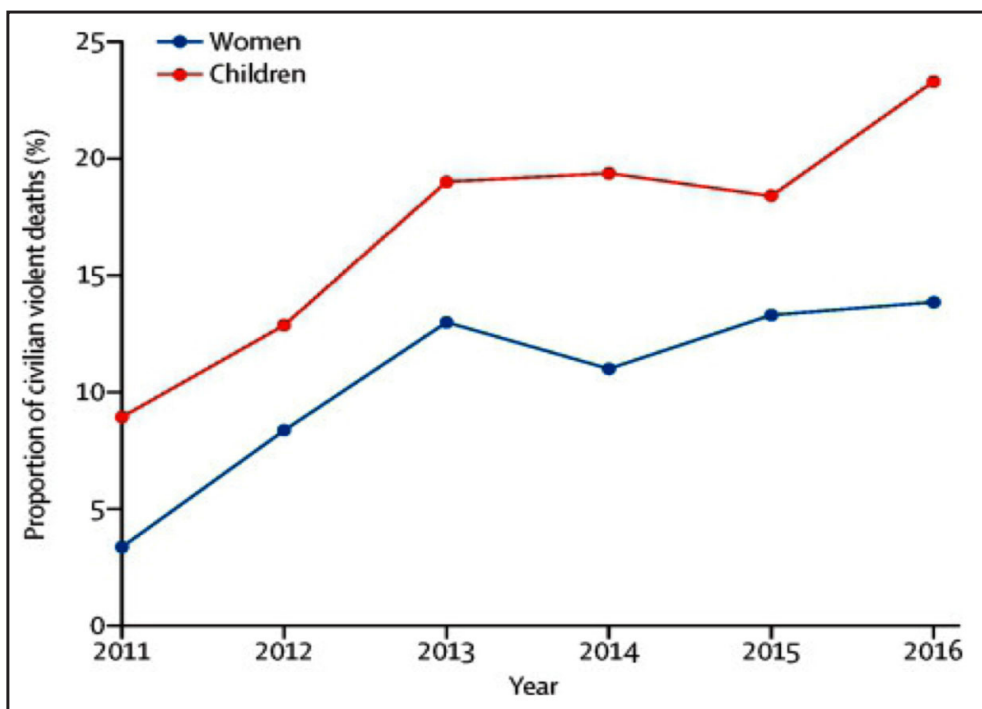


Figure 2: Percent of Children Deaths 2011-2016

## **WHAT ARE SYRIAN'S GREATEST CHALLENGES?**

Poverty and unemployment are two of Syria's most pressing problems, compounded by the COVID-19 pandemic. According to a World Bank assessment, more than 70% of Syrian refugees are poor. Based on the report by UNHCR assessment, one million more Syrian refugees and 4.4 million residents of their host communities in Jordan, Lebanon, and Iraq were forced into poverty shortly after the outbreak. Millions of people are losing their jobs and becoming increasingly unable to meet their necessities, such as access to clean water, electricity, nutritious food, medicines, and paying their bills. The economic downturn also exposed them to various protectionist risks, such as child labour, gender-based violence, early marriage and other forms of exploitation.

Refugees living in refugee camps or camp-like situations also face an increased risk of COVID-19 infection. The overcrowding in the refugee camps made it difficult for them to practice public health measures such as frequent hand washing and physical distance from each other. This will make them vulnerable to the threat of COVID-19 outbreak after various threats occur in their lives. Throughout the epidemic, UNHCR has increased its efforts to combat and restrict the spread of COVID-19 by providing protective equipment to hospitals and health centres, distributing medicine, and building quarantine rooms and hygiene facilities. It has also provided emergency cash aid to nearly 800,000 extra Syrian refugees to help them fulfil their most basic needs.

## **THE UN REFUGEES AGENCY (UNHCR)**

Millions of Syrians have escaped across borders in what has become the world's largest refugee crisis in decades. Turkey hosts the most significant number of registered Syrian refugees, currently more than 3.6 million. The vast majority of Syrian refugees in the neighbouring countries live in urban areas, with only 1 out of 20 accommodated in a refugee camp. In all neighbouring countries, life is a daily struggle for more than a million Syrian refugees, who have little or no financial resources. Many lost employment since the COVID-19 pandemic has broken out. In Lebanon, nine out of ten refugees now live in extreme poverty. There are no formal refugee camps. As a result, Syrians are scattered throughout urban and rural communities and locations, often sharing small basic lodgings with other refugee families in overcrowded conditions.

## **WHAT IS UNHCR DOING TO HELP?**

UNHCR provide life-saving humanitarian aid for Syrian refugees, helping the most vulnerable with cash for medicine and other necessities, stoves and fuel for heating, insulation for tents, thermal blankets and winter clothing. UNHCR also help refugees with access to clean water and sanitation. For those who have been displaced but remain in Syria, we provide shelter kits and non-food items and protection services and psychosocial support. During the COVID-19 pandemic, UNHCR has supported hospitals and other health structures in areas where refugees live. It also provided emergency cash grants to those who were hit hard by rising poverty during the pandemic and were often unable to pay for rent and clothing or put food on the table. To ensure a coordinated response in the central refugee-hosting countries, UNHCR co-leads the Regional Refugee and Resilience Plan (3RP) for 2021. In 2021, the 270 partners under the plan supported more than 10 million people, including over 5.5 million Syrian refugees and 4.8 million members of their host communities. This is the highest number since the Syrian Crisis began. The required

funds for 2021 will be used to address the most pressing needs, among them, for example covering school fees for children and youth, food and cash assistance, access to primary health care and hospital treatment for hundreds of thousands, livelihoods support. In addition, they will help to address the most common protection risks, such as gender-based violence. Much of the funds will also be used to strengthen national and local systems and their ability to deliver services to host communities and refugees who live side-by-side. The 3RP complements the Humanitarian Response Plan, which is covering humanitarian action inside Syria.

## **ROLES OF REGIONAL AND INTERNATIONAL ORGANIZATIONS ON SYRIAN REFUGEES**

### **ASEAN**

The expansion of non-ASEAN refugees in the region suggests that this is no longer an intra-regional issue that can be solved exclusively through internal means. As ASEAN and the AICHR are the overarching regional human rights bodies, they should explore ways to establish strategic cooperation and partnership explicitly focused on forced migration issues with the African Union, African Commission on Human & Peoples' Rights (ACHPR) or the Organisation of Islamic Cooperation (OIC). Apart from leveraging the existing regional human rights mechanism, ASEAN should develop a more concrete and sustainable platform to discuss forced migration beyond the three pillars of the ASEAN Community. The logic is simple. Forced migration is an issue of political security, socio-cultural and economic integration. Hence, a fourth ASEAN Community pillar may be established to discuss regional solutions to multifaceted issues such as forced migration.

To conclude, the forced migrant population by default has been a part of ASEAN society since the Indo-Chinese refugee crisis in the late 1970s up until the very recent Rohingya catastrophe and also the Syrian Crisis. The uncertain international response to reduce the burden of asylum countries indicates that forced migrants will likely be in a "protracted situation" as they wait for a definite solution.

### **European Union (EU)**

After almost a decade of war, Syria's Crisis is marked by unparalleled suffering and needs. Syria counts close to 7 million internally displaced, the largest worldwide, while another 5.6 million Syrians have fled across borders. A ceasefire in Northwest Syria since early 2020 has not prevented clashes in Idlib, where the humanitarian situation remains alarming. With only half of the health facilities fully functioning and increasing economic hardship, a surge in coronavirus cases is worrying. The EU continues to be a significant humanitarian donor to Syrians in need. The EU and its Member States are the leading international aid donors towards those affected by war in Syria. Since the Crisis in 2011, more than €24 billion has been mobilized to support the most vulnerable Syrians inside the country and across the region. The EU has been the driving force of the Syria pledging conferences, which took place in Brussels for five consecutive years (2017-2021).

In 2021, the European Commission alone mobilized €130 million in humanitarian aid to provide vital assistance to millions of people inside Syria. The new fund, announced during the Brussels V Conference for Syria, is part of the €195 million released for the regional Crisis, helping Syrians in need inside the country and across the neighbourhood. Following the latest

escalation of fighting in northern Syria and the threat of COVID-19, the EU repeatedly called for a ceasefire which eventually came into effect on March 5 2020. In light of numerous attacks on civilians, hospitals, and schools during the past decade, the EU has continuously urged all parties to the conflict to allow unimpeded and safe humanitarian access to people in need. It also repeatedly called for the respect of International Humanitarian Law. After the latest mass displacement of populations in early 2020, EU humanitarian partners ramped up their emergency assistance. They also adapted ongoing programmes to include preparedness and response interventions related to the coronavirus outbreak, a first case confirmed in Syria around mid-March.

Inside Syria, EU humanitarian assistance supplies over 40 humanitarian partners working countrywide where needs are the most acute. They are providing Syrians with food assistance, most often in the form of cash, but also with healthcare, shelter, water, sanitation and hygiene, psychosocial support, essential household items, and education and protection. In addition to life-saving aid, the EU also supports cash assistance to build people's resilience to prevent them from falling back into life-threatening situations. As humanitarian organizations operate in very challenging circumstances, obstructed by insecurity and continued access constraints, they strictly adhere to the humanitarian principles of humanity, neutrality, impartiality and independence.

### **Organization of Islamic Cooperation (OIC)**

The OIC has adopted a similarly proactive stance on the humanitarian crisis underway in Syria since March 2011, with the secretary-general consistently urging the Syrian leadership to shun "the excessive use of force against civilians" and reminding it of Syria's legal and human rights obligations under the OIC Charter and the Ten-year Programme of Action. For over a year, it adopted a cautious approach to resolve the Syrian Crisis internally politically and thus sent a peace envoy to Damascus in May 2011 and subsequently supported the Arab initiative and the six-point peace plan proposed by the UN-Arab League envoy Kofi Annan. The joint UN-OIC Humanitarian Mission also began operating in Syria during that time. In the OIC's policy pronouncements on the Syrian Crisis, the Islamic principles of human compassion and dignity were frequently invoked to dissuade "all the perpetrators of violence" in Syria from resorting to violence against civilians. However, in recent months growing frustration with the failure of the Arab League and UN observer missions and peace initiatives, together with the reported occurrence of deliberate massacres of civilians, seems to have compelled the OIC leadership to appeal to the UN Security Council to "take necessary and urgent measures to stop the bloodshed in Syria" and urge the opposition Syrian National Council to "unify their ranks". The OIC leadership has also started actively participating in the meetings of the Group of the Friends of the Syrian People.

The OIC's conduct during the Libyan Crisis and the unfolding civil strife in Syria indicates that the organization has come of age insofar as civilian protection in armed conflict within a member state is concerned. In both cases, OIC deliberations on protecting civilians in armed conflicts do not include any explicit reference to the concerned state parties' obligations under international humanitarian law (IHL or, more specifically, the 1949 Geneva Convention and the Additional Protocols of 1977. However, the fact that the OIC supported international intervention in Libya and is now in favour of UN Security Council intervention in Syria implies that the sole motivation behind its proactive engagement in the two cases has been to protect civilians from deliberate acts of violence as required under IHL.



Towards this end, the OIC has used a legal argument by referring to the organization's founding and more recent documents, as well as moral justifications<sup>4</sup> Ishtiaq Ahmad The Organisation of Islamic Co-operation's position on the protection of civilians in armed conflicts October 2012 by invoking Islamic norms forbidding the killing of civilians. Its 1999 Convention on Combating International Terrorism uses the same rationale to reject all "forms and manifestations" of terrorism, whose predominant expression in urban space primarily victimizes civilians. Saudi Arabia, Turkey, Qatar and the United Arab Emirates (UAE) are four Muslim countries that have actively pursued the humanitarian discourse on Libya and Syria. Their respective national approaches have primarily evolved in unison and have mainly been compatible with the OIC's unprecedented conduct during the two crises. Saudi Arabia's clout in the OIC arises from its role as its founder and host of the General Secretariat. The fact that an assertive secretary-general of Turkish origin leads the OIC gives Turkey a certain degree of influence to determine its agenda, in consonance with that country's growing regional diplomatic profile in recent years.

The same period has seen Qatar and the UAE pursuing an assertive foreign policy in coordination with Saudi Arabia. There is no doubt that particular regional political interests have determined these four countries' postures in the crises in Libya and Syria. The OIC's overall stance in the two instances has also mainly evolved along similar lines. However, at least in the Syrian case, the OIC leadership is careful to distance itself from the interventionist position being articulated by Saudi Arabia and Qatar that of funding and arming the Free Syrian Army because it fears that the pursuit of such an option may only add to the already difficult urban and asymmetrical warfare situation, causing even more significant loss of civilian lives and civilian suffering in Syria.

## **CONCLUSION**

In some respects, President Bashar al-Assad has nearly claimed victory. The end of the war will be a relief for some. The conflict has engulfed almost all of Syria. It has reduced the nation's largest cities of Aleppo, Raqqa, Homs and Damascus to dust and rubble. It has claimed the lives of more than 370,000 Syrians, including more than 110,000 civilians. Moreover, it has created more than 5 million international refugees and 6 million internally displaced people. However, the slow rebel surrender will probably amount to, at best, a hollow victory for the regime. The Assad regime's history of repression and violation of international humanitarian law means that rebel retreat will by no means automatically convert into effective government control. When the war ends, the toll of "peace" is likely to be relatively high for Syria and Syrians. In the meantime, the number of people fleeing persecution is unlikely to lessen shortly due to geopolitical uncertainty, ongoing civil wars, military intervention and human rights violations that occurred in almost all parts of the world. Trends of forced migration have evolved unconventionally due to globalization, technological advancement and high connectivity in transportation. Consequently, ASEAN is no longer a haven for the forced migrant population from its member states but other regions and continents. For example, about 14% of 65.3 billion forced migrant populations are currently hosted by nations in the Asia and Pacific regions. The majority (53%) are coming from three major nations, namely Somalia, Afghanistan, and Syria (UNHCR, 2017). How ASEAN would respond to these trends rely heavily on its individual member states' commitment and shared responsibility to make the region a place called "home" for everyone. This shows how seeks ASEAN could ensure their regional integration efforts would be indeed "inclusive" and guarantee a better future for the forced migrant population in the region.

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## **NATIONAL TASK FORCE ROLES IN MAINTAINING NATIONAL SECURITY DURING DISASTER: COVID-19 PANDEMIC**

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### **ABSTRACT**

*The issues of National security and sovereignty is not an easy matter that can be resolved by anybody. The concept of Comprehensive Security (COMSEC) as announced by the Prime Minister recently needs to be understood and practiced in depth and needs to be grasped fully. All levels of society have a role to play so that the people can live in peace, tranquillity and so that the national defence is preserved. regardless of the situation and circumstances, National Task Force (NTF) pledges and insists that it will not allow Malaysia's land to be invaded even by an inch.*

*"I would like to inform that along the borders of our country, there are many rat lanes. Illegal immigrants usually pass through these alleys. If we increase control, they may get away with it and bring the virus into our country. I have instructed the Inspector General of Police, Commander of the Armed Forces, Director General of the Malaysian Maritime Enforcement Agency, Immigration, RELA and other relevant agencies to tighten the control along the country's borders..." – Prime Minister, 10th April 2020 (Friday)*

**Keywords:** *Movement Control Order (MCO), COVID-19, Comprehensive Security (COMSEC), National Task Force (NTF), Op Benteng, Tekong, Immigrants*

### **INTRODUCTION**

Task Force is not a new term in our world today. This term has been used since many decades ago and in many forms. For example, in the United States, a task force has been set up for The National Task Force on the Criminal Backgrounding of America. The Task Force comprises of representatives from federal agencies, including the Federal Bureau of Investigation (FBI), the Department of Justice (DOJ), the Department of Defense (DOD), and the Office of Personnel Management (OPM), volunteer organizations which screen volunteers' backgrounds and many other agencies. Another example of national Task Force is the establishment of national task forces for the 18 Middle East and North African (MENA) agencies for economic purposes. The national task forces are established to support regional ownership and accuracy of the "Inventory of Policies, Institutions and Programmes Supporting Women's Enterprise in the Middle East and North Africa".

### **BACKGROUND**

In Malaysia as the COVID-19 pandemic worsens, a special task force known as the National Task Force (NTF) was established on May 6, 2020 aiming to strengthen the country's border control from the entry of illegal immigrants to curb COVID-19. Malaysia Armed Forces was appointed as the lead agency in the NTF and through the implementation of Operation Benteng, NTF has made national history when the Security Forces together with 19 enforcement agencies and the MOH had been involved in an unprecedented mission as entrusted by the country's leadership. Interestingly, these 19 agencies are not all from uniformed teams but also non-uniformed agencies and departments such as Malaysia Armed Forces, Royal Malaysia Police, Maritime Agencies, Malaysia Joint Forces Command, Malaysian Army, Royal Malaysian Navy, Royal Malaysian Air

Force, Eastern Sabah Security Command, Immigration Department of Malaysia, Royal Malaysian Customs Department, National Anti-Drug Agency, Malaysian Border Security Agency, Malaysia Volunteers Corps Department, Fire and Rescue Department of Malaysia, Forestry Department, Department of Wildlife and National Park, Malaysian fisheries department, Maritime department and Malaysia civil defense forces. This operation is implemented by mobilizing integrated forces to control the land and the maritime and air, through the 6 D's method, namely Deter, Detect, Deny, Detour, Detain and Deportation.



Figure 1: Agencies in National Task Force

## NATIONAL TASK FORCE UPHOLDS HANRUH (TOTAL DEFENCE)

Although it seems that NTF establishment is similar to the assignment of other agencies, from the strategic point of view of national defence, the existence of the NTF directly supports and realises the HANRUH Concept or Total Defence. HANRUH is a concept of understanding and emphasis that the responsibility of defending the country's sovereignty and security is not only on the shoulders of security personnel alone but also the responsibility of every individual born, and who professes to be a Malaysian regardless of age, race or sector. There are three main messages in the HANRUH Concept: avoid taking national security and defence lightly, emphasize the mobilization of the entire government and society (the entire government and society), also the credible partnerships for national security both inside and outside the country.

## NATIONAL TASK FORCE STRUCTURE AND HOW IT OPERATES

The NTF organization is covered both in Peninsular and East Malaysia. Every agency is co-located in both theatres. It is headed by National Security Council and Chief of Armed Forces. In a letter dated 29 Apr 20, the NSC has appointed the Commander of the Western Fleet as NTF. It is clear that Malaysia is a maritime country. With an area of 877 square meters covering the Peninsula, Sabah and Sarawak, there are many challenges that need to be faced by enforcement agencies in addressing cross-border security issues. At a time when the country is facing the COVID19 pandemic which seems to have no end, the country's borders continue to be tightly controlled to curb activities that threaten the country's sovereignty, especially the smuggling of illegal immigrants. To that end, the National Task Force (NTF) through *Ops Benteng* continues

to strengthen operations and implement the Resistance Prevention method at all ‘hot spots’ and national border gates. The network tracker tracking system and information delivery to identify PATI boats are optimized.

To further launch this operation, NTF divides its focus and assignment into six axes, namely Axis 1: Northern Waters of the Straits of Melaka, Axis 2: Selangor State Waters, Axis 3: Southeast Johor Waters, Axis 4: Malaysia-Thailand Land Border, Axis 5: Malaysia-Kalimantan Land Boundary and Axis 6: East Coast of Sabah. Of the 6 locations, Axis 2: Selangor State Waters was identified as the hottest spot when it recorded the highest influx of illegal immigrants along *Ops Benteng*. With the cooperation in this operation, NTF succeeds in tightening the land and sea border controls and facilitating the work process of each agency. This is because most aggression activities are interrelated with other cross-border crimes. Also, NTF coordinates the sharing of intelligence information between the agencies involved through the Combined Intelligence Working Group and coordinates the logistics procurement of the agencies.



**Figure 2: National Task Force Action Plan**

The priority is the tasks coordination so that this integrated operation can be conducted optimally using the existing assets in all the agencies. The use of human resources, especially in intelligence capabilities and information sharing between agencies is fully mobilized to achieve the objectives. The integration of the land, sea and air components under the NTF also succeeded in enhancing cooperation in terms of information sharing from the tracking system and strengthening the communication system network. With a strong communication network, it managed to improve the relationship between all agencies. Uniquely, the task integration performed under this agency does not interfere with the essential tasks of the departments and agencies concerned. Furthermore, with 6 D's method, the operation becomes more tightened and coordinated because each of the methods has its own objective such as: Deter - Implementing barrier prevention by using methods of demonstrating presence in the area of operation at all times. Detect - Optimizing the tracking system, tracking and information delivery network to identify illegal immigrant boats. Deny - Coordinating operations with other security agencies in curbing the entry of illegal immigrants. Detour - Expelling and Shadowing PATI boats out of Malaysian waters. Detain - Detaining and handing over illegal immigrants to the authorities for further action. Deportation - Providing asset assistance to authorities and agencies involved in the repatriation of illegal immigrants to their country of origin.





Figure 3: Enforcement Agencies in Ops Benteng

NATIONAL TASK FORCE ACHIEVEMENTS

Its establishment is only at its infancy but the achievements and success is very impressive, where the activities that threaten the national security were successfully defeated either by road or through national waters. Undeniably, a lot has been achieved. Every day, there are reports of successful arrests of illegal immigrants, smugglers and drug traffickers either by land or through national waters. It is even more gratifying when the NTF also managed to detect some hotspots, the preferred route for illegal immigrants to cross the country’s borders, making it difficult for them to enter or leave the country. Through NTF sources, about 500 hot spot routes have been detected in the Peninsula, Sabah and Sarawak and this number may have increased. As for the maritime route, there are several hotspots for PATI’s entry, namely in Langkawi Island, Kedah; Kuala Selangor, Selangor; Tanjung Piai and Southeast Johor. In fact, the authorities managed to detain hundreds of landlords, agents, ‘transporters’ and owners of ‘shelter’ premises. According to NTF sources, for almost 423 days of *Ops Benteng*, the cumulative number of illegal immigrants arrested was 9,312 with a total of 14,620 illegal immigrants arrested and 1,085 *tekong* arrested. Of the total arrests in Axis 2 alone, there were 1 061 (11%) cases with a total of 3 317 (23%) illegal immigrants arrested and also a total of 238 (22%) local *tekong* detained. Authorities have also seized 809 boats and vessels, 730 land vehicles and 1,801 other items used to commit trans-borders crime.

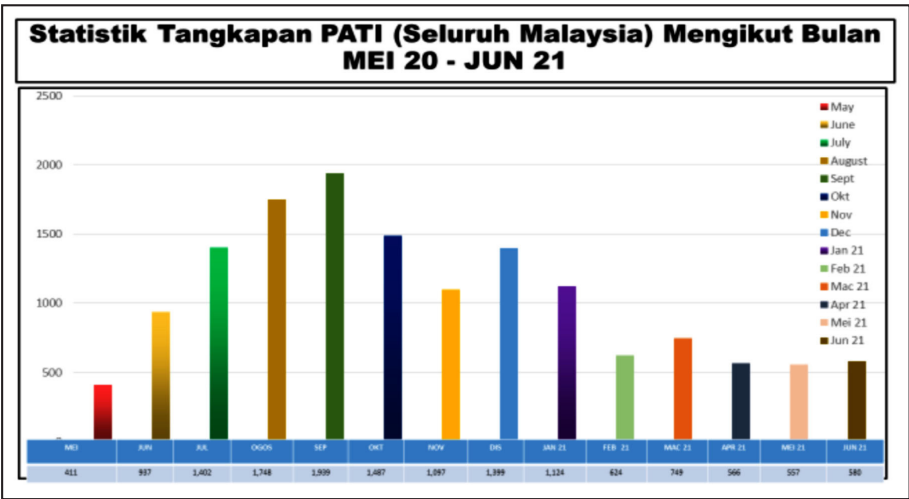


Figure 4: Statistics of Illegal Immigrants That Arrested from May 2020 Until June 2021

Source: NTF 2021

During Ops Benteng, various items were seized from smugglers and the confiscated items were returned to the government as a revenue. It is reported that between May and 31 December 2020, the total confiscation made by NTF is RM 237.2 million while for the year 2021 to July 2021, the total value of confiscation is RM 341.7 million. It is the result of cooperation, integration and careful planning by all enforcement agencies under the coordination of the National Task Force (NTF). The integration of the land, sea and air components under the NTF also succeeded in enhancing the cooperation in terms of information sharing from the tracking system and strengthening the communication system network. With a strong communication network, it managed to improve the relationship between all agencies. Uniquely, the task integration performed under this agency does not interfere with the essential tasks of the departments and agencies concerned.

NTF is also involved in coordinating the repatriation of illegal immigrants from several neighbouring countries with the Malaysian Immigration Department and this successful enforcement is testament to the close cooperation between all agencies. The issue of Rohingya migrants currently trying to infiltrate into the country, is also the main focus of the NTF radar nowadays. The last success story is the solid and continuous support from our own people. The implementation of this operation has received the support of the people with a total of 653 complaints recorded through the NTF hotline which has been activated since June 20. The determination of the people has resulted in a series of successful operations such as the success of cracking down smuggling operations, and also the detention of illegal immigrants who attempt to cross the country's borders.



**Figure 5: Deportation of Illegal Immigrants**

## CHALLENGES

Like many other enforcement tasks, NTF also is not spared from facing limitations and challenges. As for NTF, the most challenging part is to coordinate and make every agency involve speak in the same language when it comes to preserving the national security and sovereignty. More synchronization is needed. Therefore, certain policies, strategies and procedure need to be scrutinized to so that they can facilitate the implementation and ensure the success of many future operations. Apart from that, the government is also asked to see the addition of facilities of operational posts throughout the country. Among the problems faced by enforcement agencies is the fact that the posts are located too far from each other which makes it difficult to deploy the monitoring more effectively. As an example for the Nyah Operation in Selangor, the coastal area that needs to be covered is 587 square km but only 21 posts have been set up.

Apart from that, the distance for each post is also inconsistent and some are located too far from each other. For example, from the base of 4th Battalions PGA to the post of Sungai Lalang, the distance is 168 km. The facilities and amenities at the posts should also be taken into account as they are quite dilapidated and damaged. The safety and morale of the members on duty must also be taken into account. Regarding the issue of arresting illegal immigrants, one thing that needs to be taken seriously by all parties is the involvement of local people as *tekong* who help illegal immigrants enter the country and the number is said to be steadily increasing. In other words, the state enforcement agencies must confront and eradicate the enemies in their own country who are traitors gambling on the sovereignty and security of the people of this country for their own benefit. Everyone is aware that the presence of the illegal immigrants is now a serious issue and is frowned upon by the majority of the people of this country regardless of their background. From a strategic point of view, their presence in the country has raised many issues of national security and order, starting from the episode of illegal entry and lack of documentation, the involvement of the *tekong*, living overtime without end and being involved in various criminal cases, drugs, robbery and many more. Apart from that, the government also had to bear the financial burden of covering the costs of those detained in detention depots. In the first 6 months alone, the government has spent almost RM 36.61 million for a total of 15 552 illegal immigrants detained at 4 immigration depots nationwide with an average daily expenditure of RM 201,185.00. This is for food expenditure alone four times a day.

In the COVID situation that shows no sign of subsiding in our country, the government has to issue additional allocations for swab tests for each illegal immigrant as well as incur expenses for other diseases. With an expenditure of almost RM 50 million to manage illegal immigrants, it is better to use it for the welfare and health of the people themselves, whether it is the construction of facilities or welfare assistance to those affected by this pandemic. What is even more worrying now is that the influx of these illegal immigrants also carries the Alpha and Delta COVID-19 variants which are feared for their very fast infection and silent kill. This was evident when a few illegal immigrants arrested in this month alone were confirmed as carriers of the dangerous variant.

Although NTF is supplied with new assets and equipment, if the society themselves does not have an awareness as well as a sense of love to put the interests of the country, efforts to maintain security and sovereignty and national waters face little difficulty. The people, whether at the lower middle or upper levels, must be aware of the threats they face now and it is necessary to work together to overcome this problem. It is time for all parties to set aside any ideology and

stance that disputes the question of national security instead help come up with the best solution, to look into the pressure groups also the national security issues more clearly and deeply than being humanitarian fighters for illegal immigrants, refugees or any other groups of people. The relevant parties need to expedite the study, presentation and approval of the Act and the bill related to these PATI issues. Perhaps, the existing act needs to be tightened such as whipping imposed on illegal immigrants or *tekong* as enforced in neighbouring countries.

The ideas and views of academics, experts and thinkers also need to be mobilized to produce a solution that will be able to overcome this problem for a long time. Education and awareness from the beginning should be inculcated to the younger generation and we should also be the eyes and ears of the government instead of colluding with traitors. All levels of the society need to be aware of the current security threats. They need to pass the information to the authorities, and further bear the responsibilities. The concept of Comprehensive Security (COMSEC) as announced by the Prime Minister recently needs to be understood and practiced in depth and fully. All levels of society have a role to play, and the responsibility of national security to bear, so that the people can live in peace, tranquillity and so that the national defence is preserved. Regardless of the situation and circumstances, NTF pledges and insists that it will not allow the Malaysian land to be invaded even by an inch.

## WAY FORWARD

In order to further strengthen the NTF, the government has to look into the aspect of procurement new assets. This involves not only the Malaysian Armed forces but the Royal Malaysia Police, Maritime Enforcement Agency and other agencies as well. This move is necessary because Peninsular and East Malaysia is wide and covers a long stretch with several islands that could be used as the illegals' transit points. Even though The Armed Forces had procured 11 units of the Rigid Hull Inflatable Boat and one multipurpose boat to maintain border security at sea and received 27 all-terrain vehicle units to intensify the mobility in Ops Benteng, it is the right time for Malaysia to use the modern technology such as unmanned aerial vehicles (UAVs) and "Maritime Patrol Aircraft" (MPAs) for maritime air surveillance and control along with other present assets. This move will definitely increase the country's defence system, particularly through military air assets.



**Figure 6: New Assets for National Task Force**



Government should also look into the use of the new version of the radar to be stationed in critical posts and stations such as at Selangor and Sabah coastal areas, as these places are the main target as landing points for the illegal immigrants. Cyber and electromagnetic domains also have to be given serious attention as this domain could assist the agencies in their role. For existing assets, maintenance costs are also required to ensure that assets such as aircraft belonging to the Royal Malaysian Air Force (RMAF) can operate properly for the operation of Op Benteng. The acquisition and maintenance of the assets is important to enable the MAF to patrol the land and water border areas to detect and prevent illegal immigrants from entering the country. Apart from Op Benteng, the assets could also be deployed for operations around the South China Sea to curb any attempt to encroach the country's territorial waters, including by foreign fishermen.

Therefore, a proper and consistent budget allocation is required and the government has to look into this issue seriously. High hopes are placed that what is planned in the defense white paper must be related to the needs of the national defense budget and it will be prioritized. Other than asset and equipment at the implementation level, in order to strengthen the present of NTF in the public eye, more coordination and communication need to be toughened. Any "grey area" during the operation and implementation, among agencies must be cleared immediately. This includes producing new policy and guidance that need to be adhered to and followed. Restudy and revise the existence policy if it is not enough to cover every angle of the requirement for the team to commence their job and task, and the last one is to issue any non-relevant policies that might become the obstacle to the operation conducted.

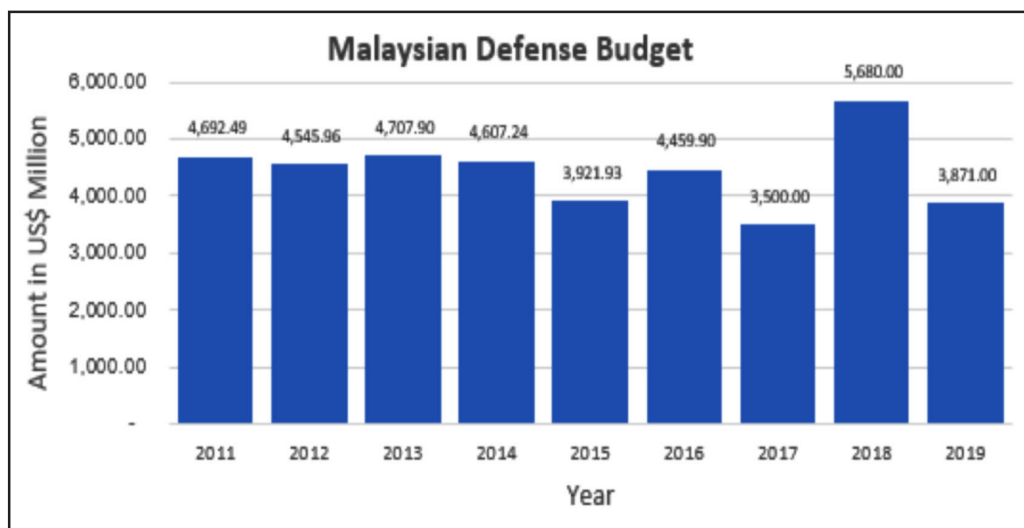


Figure 7: Malaysian Defence Budget for Past Nine Years

As for communication, the flow and the chain of the communication need to be check out. There are some situations where the guidance is not passed well to those who are supposed to get the information. The possible issue here is the "language" barrier in terms of understanding the terms and command that should be followed. It is understood that it is not an easy task to make all agencies understand each other within a short period of time, Hence, the emphasis on communication and a better understanding among all the agencies from top to bottom and vice versa is crucial.

In order to fill any gaps between the agency, a coordinating training and exercise needs to be conducted. It could be done into phases or according to location. Other than improving the understanding and communication among the personnel, definitely the training and exercise will improve the interoperability among the agencies in terms of knowledge and also the use of asset and equipment. The exercise and training would also be the medium for the personnel among the agencies to know and comprehend each other.

## **CONCLUSION**

It is true that it is not an easy task for the enforcement authorities to defend the sovereignty and security of the country, let alone when the challenge of threats now comes from various angles and in increasingly complex forms. Criminals are also increasingly clever and cunning in manipulating every opportunity and space available, but that does not mean that the NTF and enforcement agencies are intimidated and shaky. The support and cooperation of all Malaysians are very much needed.

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## Preparation of Manuscript and Online Submission

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Kadlec, R.P., Biological Weapons for Waging Economic Weapons. *In Battlefield of the Future: 21<sup>st</sup> Century Weapon Issues*, (Schneider, B.R. and Grinter, L.E., eds), Maxwell AFB, AL, Air University Press, 1995.

#### Journals /Serials

Henderson, D.A., The looming threat of bioterrorism, *Sci.*, 283: 1279-1283, 1999.

#### Online Sources

Hurlbert, R.E., Chapter XV, Addendum: Biological Weapons, Malignant Biology, Available from <http://www.wsu.edu/~hurlbert/pages/101biologicalweapons.html>. (Accessed on 30 January 2010).

#### Unpublished Materials (e.g. theses, reports and documents)

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