

Malaysian Armed Forces Logistic Management Problem: The Effect to the Country's Defence

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Abstract— The country's military development is a need to the country to ensure its viability. With the development of threat that not only traditional threat but it changes to the non-traditional threats. The security threat has influence the country's military development and Defence Policy. It also implicates Malaysia which actively developing the military after the Cold War in 1991. Between 1957 to 1991, Malaysia has been focusing to the threat in the country specifically the communist threat that affects the country's safety and sovereignty. After the peace treaty between PKM and Malaysian government in 1989, Malaysia begins to actively developing the military. It is seen as a need for Malaysia to ensure the safety and defence of the country is in red alert to face any threat. However, in the rapid development of the military, there are some who see Malaysia is having problem to ensure the country's readiness in facing the threat. With various negative issues being reported, it has raised question on the current status and the problem that Malaysia is facing in ensuring Malaysian Armed Forces (MAF) readiness. Therefore, this study touches the problem faced by the government and specifically MAF in logistics aspect that gives impact towards National Defence Policy (NDP).

Keywords- Logistic management, readiness, national defense policy

1. Introduction

Generally, direct military threat did not occurred to Malaysia after the Confrontation in 1965 [1]. This is because the government focused on the transnational issues or non-traditional as the main threat towards the country. Considering this, NDP based on the MAF logistics asset increment capability based is to defend the country and not threat based. On the transnational issues, terrorist threat is totally different from what we experienced before [2]. The significant difference are through the characteristics, where the recent terrorism not only focusing on the security force, but putting pressure to the society to oppose the current government policy [3]. The difficult challenge is to expect the terrorist action and the effective way to resolve it without unwanted incident.

In this case, MAF had to change its doctrine because the terrorist threat can come in various angles and forms. The integrated assemble of real time intelligence is a step to be taken as one of the ways to resolve the issue.

Most of the assets bought by the Malaysian government in solidify the country's defence were used and outdated. This creates various problems; and the used and outdated airforce assets will expose to the air threat from the enemy [5]. This is because most of the Malaysian Army (MA), Royal Malaysian Navy (RMN) and Royal Malaysian Air Force (RMAF) equipments were bought between 1970s to the end of 1990s and still in MAF main inventory [6]. Other than that, lack of modern and latest military assets faced by MAF, will expose it to the internal threat and especially external threat that is escalating with the uncontrollable situation in the southern Philippines and China's aggressive stand in the island conflict issue in the South China Sea [7]. Besides, the government is incapable to provide and equip modern and latest defence assets to MAF. Moreover, KD Rahman submarine issue (Scorpene) that cannot submerge in the demersal because of technical problem in 2010. It was a conventional submarine that can hold 10 torpedo and 30 mine destructors, was able to observe the country's waters between 100 to 200 meters in depth. This also shows that the defence asset is outdated and cannot function well [8].

With various reports on pirates' attacks and abductions in Sabah waters, terrorists attack in Lahad Datu in February 2013 and recently the missing RMN boat KD Perdana on 22 May 2017 for a few days due to communication problem. This scenario creates concern towards MAF logistics to ensure and guarantee the country's security. With many series of RMAF training and fighter aircrafts crashes and accidents involving MA and vehicles damages that happen quite often, raise questions to the government policy that still maintain the outdated vehicles for country's defence. Therefore, this study examines the problem in MAF logistic aspect and the effect towards the country's security [9].

2. Literature Review

2.1 Logistic Management Theory

Logistic is the fundamental of combat power, the national service ability and the only one to start and maintain logistics support maybe seen as the main factor that limit the ability of tentera darat, pasukan tentera laut and udara to apply and maintain the combat power. To achieve good and comprehensive support and logistics system in MAF, it organizes a few logistics principles that should be complied and as the reference to the organization, planning, management and implementation of logistics support [10]. Identifying principles that have priorities in certain situations is important to form effective support. Logistic principles prescribed are as follow:

- First is the Readiness. Readiness is the ability to provide minimum supply and service needed to start a combat operation. The operation should not start until the minimum support level is in hand.
- Second is Responsive. Responsibility is an accurate support at an accurate place at an accurate time. Among the logistics principle, responsive is a keystone. All of the others will not be relevant if logistics system cannot support the operation concept.
- Third is Flexibility. Flexibility is an ability to adapt logistics structure and procedure to change situation, mission and operation concept. Logistics plan and objective must be flexible to achieve both responsive and economy.
- Fourth is Moderation. Moderation is the ability to instill proficiency in both planning and operation implementation of logistic support through order and standard procedure, establishing priorities and supply pre-budgeting and service by the unit that is supported. In implementation, the logistic unit must let free of combat unit logistic function burden as far as possible.
- Fifth is Economy. Economy is the preparation of support at least the costs of power, for example labour, tools and monetary, that are ready and needed to achieve the mission. At certain level, the power resource is always limited. When prioritizing and provisioning, the commandants, must immediately consider the economy. The logistic physical asset centralization tends to create economy. However, it can be done with responsive cost. Centralize control with decentralization execution offers balance between responsive and economy. The commander cannot allow economy to stop the effectiveness or military performance.
- Sixth is Sustainability. Sustainability is the ability to sustain logistics support during the operation. Sustainable principle focuses on supporting long term objective and the needs of supported team. Having logistics support needed to start an operation alone is not enough, the support must sustain during the operation.

- Seventh is Service Support. The only one and effective service (Army, Navy and AirForce) to support every service. The logistic ability is maintained to ensure there is an integral logistic support needed by the military to operational operation.

- Eight is Civil National Support. Although the public infrastructures cannot give this ability, it can be used to decrease the effective support operation burden and can achieve the preparation of sufficient military infrastructure.

- Finally is the International Support. Malaysia has made an agreement with other countries that allow logistics support changes in operational side between the military teams for each country. But during this crisis, we cannot depend on the subject. After identifying the resources, MAF will negotiate and manage logistic support and help the implementation by the only one service [11].

The Defense Logistics Division was established to fulfill the Three Service Logistics needs in the Operation, Training and Administration aspects. It plays the role to plan, development, policy making, help and confederation training, coordination and management of logistic resources in MAF. This division is headed by Defense Logistic Head of Staff Assistant (AKS LP) ranks Brigadier General or of the same rank. This division has four Branches and charters for each of them are as follows, Logistics Policy Branch [13]. The main role of Policy Branch including responsibilities in policy making and reviewing the logistic policy in the three Services including movement and transportation, material resources and equipments, engineering, supply and others logistic help service [14]. Logistics Assistance Coordination Branch. This Branch operates all the logistic management tasks and financial for MAF Camps and the three service units under it. Logistic Computer System Team. This team functions to coordinate the computing needs in logistic aspect and organizing courses related to Integrated Logistic Support (ILS) for the three Services. Petroleum Storage Team. This team functions to build cooperation with PETRONAS in implementing MAF fuel storage stock suggestion when in peace or emergency and realization the establishment of Petroleum Expert Regiment (AW) suggestion [15].

2.2 The Development of Malaysian Army (MA)

For MA, there are many equipments and sophisticated security assets for the preparation and national security equipments, for example Shield, Infantry Weapons, Transportaion Vehicles and radar. MA assets include Berreta M92, Browning High-Power, colt M1911.45 ACP, Heckler & Koch P9S, Sig Sauer P226 and Vektor SP1. The shotguns include Remington M870 and Franchi SPAS-12. Submachine gun (SMG) used by TDM are Heckler & Koch MP5. TDM also has Steyer AUG A1, Karni Colt M4A1, Colt M16A1, Colt M16A1 Model 653 and Heckler & Koch

G36C [16]. For the sharp shooter rifles include Accuracy International Arctic Warfare, Heckler & Koch MSG-90, Harris Gun Works M-96 12.7mm [17]. For the bomb launcher, TDM has 3 units of bomb launcher namely M203, SACO Mk. 19 and Milkor Mk. 1. TDM also has shields of various version namely PT-91 [18], FV101 Scorpion [19], ACV 300, K-200 KIFV [20], Alvis Stromer, Bandvagn 206, AV-4 Lipanbara, Condor (4X4), Sibmas (6X6) AV-8 Gempita, URO Vamtac, ASV Guardian and Ferret [21]. For the Transportaion Unit TDM has 4x Avibras AV-VBL, HICOM Handalan Truck (4x4) 3 tonnes, Pinzgauer cannon vehicle (4x4) 2 tonnes, Pinzgauer mortar vehicle (6x6) 2 tonnes with 144 bullet trailers, Isuzu vehicle FTS33H (4x4) 6 tonnes, Isuzu communication cover FSS32G (4x4) 5 tonnes, big Ambulance IVECO M4010 (4x4) 2 tonnes, communication satellite IVECON M4012 (4x4) 2 tonnes, Big Ambulance Gomba Stonefield, Land Rover Defender, G-Wagon (local built), 4x4 Jeep J8, TATA Truck 1015 3 tonnes, TATA Truck 1613 3 tonnes and AMDAC-Oshkosh FMTV Truck 10 tonnes . The importance of logistic aspect is also explained by the MA through the official speech by General Tan Sri Dato Sri Zulkiple Kassim (Chief of Army) in 85th Malaysian Army Day Speech by Panglima Tentera Darat on 1 March 2018:-

“This core excellence can be seen through a few aspects such as overall organization development, soldiers’ increment ability and equipment and various recognitions received locally and internationally.”

2.3 Royal Malaysian Navy (RMN) Development

Other than that, MAF also has RMN assets [24] such as various ships used by the Royal Malaysian Navy such as KD Jebat, KD Lekiu, KD Mahawangsa, KD Indera Sakti, KD Lekir, KD Kasturi, KD Selangor, KD Kelantan, KD Perak, KD Terengganu, KD Pahang, KD Kedah, KD Tunku Abdul Rahman, KD Tun Razak, KD Perantau, KD Mutiara, Laksamana Tan Pasmah, KD Laksamana Muhammad Amin, KD Laksamana Tun Abdul Jamil, KD Laksamana Hang Nadim, KD Tunas Samudera, KD Sri Tiga, KD Yu, KD Jerong, KD Ganas, KD Pari, KD Serang, KD Baung, KD Paus, KD Todak, KD Perkasa, KD Perdana, KD Handalan, KD Ganyang, KD Gempota, KD Sri Johor, KD Sri Perlis, KD Kinabalu, KD Jerai, KD Mahamiru, KD Ledang, KTD Penyu, Bunga Mas Enam, FENNEC, Super Lynx and KD Hang Tuah [25]. The TLDM logistic aspect importance also stated by Laksamana Datuk Ilyas Bin Haji Din., Chief of Navy (2006) :-

“My three priorities as the Chief of Navy are as follow:

- a. *To ensure RMN armada maintain the highest readiness to face any current threat.*
- b. *To develop a relevant marine army dan having the capability to handle future uncertainties and able to support*

government policies excellently.

c. *Increase the quality of life and well being of navy people and their families, and public staffs who serve the navy and become the benchmark.”*

2.4 Royal Military Air Force (RMAF) Development

As for RMAF, RMAF has combat aircrafts namely Sukhoi Su-30 MKM, Mikoyan MiG-29, F/A-18D, BAE Hawk 208, Northrop F-5E Tiger II and Northrop RF-5E Tigereve. While for the aircrafts that carry loads are Airbus A400M Atlas, Lockheed C-130 Hercules, Cessna 402B, CASA CN-235, Beechcraft Super King Air, KC-130. Besides that, the air force assets of helicopters are Eurocopter EC 725, Alouette II, Sikorsky S-70 Black Hawk sport and Sikorsky S-61. Malaysia also has a trainer aircraft namely Aermacchi MB-339CM, Piatus PC-7, Pilatus PC-7 MkII and MD3-160 Aerotiga. Finally, the air force asset which is UAV (drone) is ScanEagle and CTRM Eagle ARV [27]. The logistics aspect importance has been explained by Chief of Air Force General Tan Sri Rodzali bin Daud in Perutusan Khas Panglima Tentera Udara Sempena Sambutan Jubli Emas Hari Ulangtahun TUDM Ke 50 Air Force College, Kepala Batas, Penang on 23 August 2014:-

“The main challenge for RMAF is to make RMAF a dominant and to be reckoned with effective air force power ability to ensure the sovereignty of air space is guaranteed safe from outside violation. Therefore, many development steps have been taken to increase RMAF capability to conquer and defend the sovereignty of country’s air space. Asset acquisition and aircrafts will be continued to implement RAMF main and secondary roles.”

2.4 The Issues That Shackle MAF Logistics

From the traditional threat view, Malaysia and MAF succeed in maintaining the security that depends on the diplomacy defense channel. However, from the military developmental view, Malaysia is far behind Indonesia who during the time was one of the great military powers in the region and already owned a Whiskey submarine and MIG fighter jet and strategic bomber [28]. But the change to the non-traditional threat has created concern towards the MAF ability based on the logistics equipment in the MAF inventory that is old.

“Malaysia is facing a changing security environment. The traditional insurgency and external land-based threat has given way, in the last few years, to predominantly maritime-based threats to the country’s security. This in the change of the dangers that the Malaysian Armed Forces must confront clearly necessitates a change in strategy. However, both economic and institutional constraints will make the changes in Malaysia’s force structure that are required for

a shift in strategy. ”

Based on the incident in Lahad Datu, Sabah in 2013 has given huge impact to Malaysia and asserted the government to overcome this problem. Among the steps in ensuring the security and sovereignty of Sabah is guaranteed, the government helped the residents of the island along the East Coast of Sabah. Sabah is actually facing various threats and security problems whether inside or outside the country and this is indirectly affects the peace and threaten Malaysia's sovereignty [29]. The Philippines political dispute, threat from the pirates or nundu and immigrants are the security threats to Sabah from the Philippines. The incident took 72 lives which 56 of them were from the TKS, ten Malaysian security personnel and six of the public. The country's peace and stability for its well-being is essential to be preserved where cooperations from all parties are required for Malaysia's survival.

3. Research Approach and Findings

In order to address the research objective, documental analysis has been performed to analyze MAF logistic aspect and its effect towards NDP. Our findings can be categories as follows;

- Logistics Development Problem MAF Logistics Resources
- Budget
- Political intervention in spending
- Outdated equipment
- Privatization of logistics division
- The Purchase Not According to Real Needs
- Low Level of Readiness

3.1 Logistics Development Problem MAF Logistics Resources

3.1.1 Service Support

Can MAF depend fully to the said resources? MAF main logistics resources support comes from the three services available resources namely MA, RMN and RMAF. But the available resources on the service branch are still in the problem of quantity, quality and limited budget. The current quantity is clearly unable for MAF to implement military operation which consume a lot of time. This is about budgeting issue when every year 70% of the allocation goes to MAF management aspect while only 30% to the defence's development. By allocating a small amount for the development spending, this limits the buying of equipment. To overcome this problem, government has taken a step to

develop the defence industry since late 1960s [30]. The objective is to MAF logistics aspect can be supplied and independent [31]. Although there is an increment by local company investment in the defence industry but the country's defence industry achievement is still slow. This can be seen between 1969 to 2014 when the defence industry fails to produce its own defence equipment equal to the overseas company. Singapore's defence industry succeeds in producing its own fighter aircraft and other various defence equipments. This weakness forcing Malaysia to import equipment and weapons from overseas to fulfill MAF needs [32]. This makes MAF logistics resources depends from the outside resources. This scenario shows that there is also a weakness in MAF readiness from the logistics aspect [33].

3.1.2 Civil National Support and International Support

According to Salim Miandad (2002) MAF now practically is depending to the unstable resources. MAF logistics resource dependent that depends to the Civil National Support and International Support is seen as:-

“Civil National Support. Eventhough the civil infrastructure cannot be relied upon to provide these capabilities, it can be used to reduce the burden of effectively supporting operations and can achieve adequate supplementation of the military infrastructure...International Support. Malaysia has in place agreements with other countries that permit the exchange of logistic support in an area of operations between military forces of each country. But in times of crises this too, cannot be relied on subjectively”.

This is because Civil National Support like the citizens' readiness to help MAF together in military operation is still questionable for MAF to depend and becoming the logistic resource [34]. The citizens' readiness to be with MAF in defending the country's security is disputable based on the National Service programme that was implemented by the government whereby it has a problem not only on the family readiness to send their children to join PLKN but also the PLKN programme structure itself is characterized as “scout course” and not into effective military training [35].

Same goes to the reservist support program that lack of society support, even the military training provided by MAF to the volunteer team is also disputable, having it done once a year that depends on the readiness of the volunteer to join the training or not is questionable towards the capability to be MAF logistics support resource [36].

3.2 Budget

Every year, Ministry of Defence mobsters the allocated

budget with the allocated needs to MAF. Budget distribution by the government is important to ensure the weakness in the defence system can be overcome [37]. Lack of budget issue is also a factor that influences MAF management problem. To ensure a success of activity and operation, MAF needs a huge budget for the latest equipment. These training and activity can increase education management quality to the future leaders while consolidating the military administration management to the MAF staffs. Huge budget can also determine the intelligence cover can be implemented in optimum capacity to help MAF in implementing its operation through military diplomacy and good two-way relationship and gives good health service to the MAF staffs in the Ministry of Defence through treatment, examination and consultation [38]. This can only be done if the MAF is given large budget. Malaysia's Defence Minister Mohamad Sabu said that the budget for his ministry will increase in 2019. He also explained that RM1.4 billion is estimated for MAF main assets maintenance is provided under Ministry of Finance, therefore the actual budget for Ministry of Defence for 2019 is RM15.3 billion. The method and mechanism of channeling the budget will be done with Ministry of Defence in the near future.

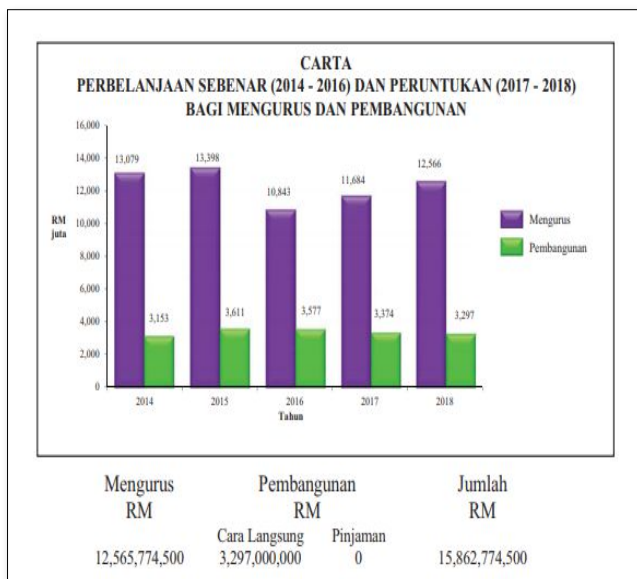


Figure 1. Military budget

MAF is a bastion defence for the country's land, sea and air. Malaysia's military strength is at 44th place from 136 countries in 2018. Malaysia's neighbor, Indonesia is way advance, at 15th place. One of the factors that made Malaysia fall behind from the military defence aspect is because of the logistic management problem for the soldiers in the country. There are some issues and factors that lead to the country's soldier's weak logistic management. The limited budget is the main reason for the low performance of MAF logistics [39]. Singapore's defence spending is one

time bigger compared to Malaysia's defence spending (Refer to Table 1). Financial ability and regional economy stability play important role in forming effective military logistic. In 2019 Budget, Ministry of Finance explained that RM1.4 billion is allocated for ATM main assets maintenance. MAF equipment needs to be maintained regularly for the soldiers' readiness in any situation in the future, be in domestically or internationally.

Other than that, the country's weak defence industry also contributes to the ineffective MAF logistics performance. Defence industry is responsible for weapons manufacturing and sale and military technology. The dependent towards outside defence industry contributes to the delay of asset recovery process factor which results in inability to conduct long term training and affects MAF readiness [40]. The weakness of country's defence industry in producing quality MAF equipment causing a threat to the soldiers' life with the damages of technical asset which cause accidents. Ministry of Defence should work harder to expand and expedite the country's defence industry by opening opportunity, giving exposure and educating more youths to pursue in the field of defence industry [41].

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Finally, the abuse of power in Ministry of Defence governance contributes to MAF logistics management problem factor. Ministry of Defence is said to be the ministry with the highest AP59 case status among the ministries. Government servants should work in transparency for the country's wellbeing and security [42].

Table 1. Comparison of Defence Spending between Malaysia and Singapore

Year Country	2004	2005	2006
Malaysia	USD\$2.25 Billion	USD\$2.47 Billion	USD\$3.08 Billion
Singapore	USD\$5.10 Billion	USD\$5.57 Billion	USD\$6.16 Billion

Finally, the abuse of power in Ministry of Defence governance contributes to MAF logistics management problem factor. Ministry of Defence is said to be the ministry with the highest AP59 case status among the ministries. Government servants should work in transparency for the country's wellbeing and security [42]. A developed and strong country needs hardworking staffs. Among the locations in development of the new camps are in Pagoh and Segamat, Johor; Bera, Pahang, and Hutan Melintang, Perak. According to Chief of Army, General Datuk Seri Zulkiple Kassim, every camp developed costs RM50 million and overall development of the camp grossly using the budget of RM200 million. The new camp that can accommodate one battalion of soldiers not only uses industrial building system (IBS) technology, but also equipped with quarters and military needs [43].

The military equipment burglary case pictures the weakness of officer in managing MAF logistics works. The process of revision and listing all military assets from the comfort and defence equipment need to done from time to time meticulously and organised so that the readiness of the country's soldiers is guaranteed [44]. Until now, MAF logistics readiness is still weak by looking at the country's military strength position where Malaysia is at 44th place in 2018. The factors above influence the country's military

logistics work. These factors are hoped to be improvised and resolved so that the readiness and country's military work is guaranteed hence bringing it to the stronger and influential defence strength [45].

3.3 Political intervention in spending

MAF development process is also influenced by the country's political stability [46]. This is because political intervention that relates country's defence spending issue with wastage causing MAF development process is stunted. The government is aware of outdated defence equipment problem and outmoded from technology advancement. Hamzah Dolah (2008) explained that development and spending towards MAF development has gone through a "gloomy" era which MAF capability development often stunted when MAF spending was always made political although it was only an accusation and political polemic. Political stability in logistics development is important to ensure the success and security of a country [47].

This is because security and defence aspects of a country cannot be neglected. Intervention scenario in MAF logistics development will affect the country's defence ability [48]. This political group's action stunts MAF development process and it directly shows weakness in MAF logistics development which is responsible in country's security and defence. The defeat of the United States (US) was influenced by many factors. This is because in Vietnamese War, the US was still strong in the battle against North Vietnam, but the main factor of defeat was US internal political pressure that forces US to withdraw from the war.

3.4 Outdated equipment

MAF logistics problem is also related with outdated equipment used such as Nuri (Sikorsky S-61A4) helicopter was bought in the late 1960s and still in use until now. With the equipment of more than 50 years old, it is outdated war equipment compared to helicopter used by other countries in war and rescue operations. For Zuridan Muhammad (2009) the government's failure in getting MAF logistics asset especially to replace Nuri helicopter (Sikorsky S-16A4) used since 1970s is questionable [50]. This will weaken MAF operation and indirectly pictures government's half-heartedness in developing MAF logistics asset [51]. For RMN, larger military equipment is needed because the country has a vast expanse of beach. This makes RMN the government body that supports Agensi Pengawal Maritim Malaysia (APMM) because the duties of waters observation can be shared by RMN and APMM [52]. RMN development plan includes the plan of buying six (6) inshore water patrol boats to overcome the outdated equipment. But this effort too is limited and encounters problem when there

is political group accused that in 2011 the purchase of six war ships cost RM6 billion was a wastage and more expensive than other countries and urged SPRM to investigate. But this is only an accusation and it stunted MAF purchase and development process. Yusni Yussof (2011) [53]:-

“For example, a member of Parliament from an opposition party in his blog accused that the purchase of six patrol off shore ships by Ministry of Defence with the cost of 6 billion were more expensive than other countries. Malaysian Anti-Corruption Commission (MACC) then took action and asked the member of Parliament to submit an official report so that investigation can be done; it is weird and funny that he refused the request. ”

Liw Shan Lee (Mei 2006) explained that military development in Malaysia is seen by the economist as a waste and not profitable. This is because military development is only fulfill defence needs and country's security policy and does not open any opportunity to the development in economy activity. Therefore, it gets less attention and involvement from the society in the defence aspect although country's defence development is a need to the country [54]. The development and modernization of MAF is seen as a waste, for example the purchase on tank and the establishment of tank regiment dan tertera darat airforce team are meant to develop defence asset and implement MAF structuring and it is not profitable to the economist. MAF development process is also associated as a waste from quality and quantity aspect [55].

MAF has purchased modern and sophisticated aircraft to RMAF; 8 units of FA-18 and 18 units of MiG 29 to enable TUDM to have aircrafts that can cover enemy threat. However, MAF strategic equipment quantity is also questionable such as the purchase 8 units of F/A 18 Hornet [56]. This is because, in order to form a squadron, it needs at least 18 fighter aircrafts. With only 8 aircrafts purchased and numbers of battleships and submarines, a total different quantity and quality compared to the neighbouring countries, raised questions about the ability to compete the enemy's strength that has more quantity. Other than that, MAF decision in purchasing 88 A4PTM aircrafts to enhance air defence ability besides FA18 and MiG-29 is having problem, A4PTM cannot be fully operated due to damage problem, spare parts and high accidents cases causing RMAF to purchased new aircraft [57].

“The purchase of A4PTM was the most purchase of aircrafts by RMAF. However, the purchase was also a big mistake for Malaysian government. A few mistakes were made without Malaysian government knowing it. Among the mistake was Malaysian government did not consider the fact that the aircrafts were left in Arizona desert for quite some

times before they were sold to Malaysia. The aircrafts frames experienced degradation due to being too long in the desert before they were handed in to RMAF.”

In May 2017, KD Perdana ship that was accredited in 1972 faced a damaged of communication tools and it lost connection from the main ship around Sedili waters, Johor Bharu. The KD Perdana was in operation to evict foreign fishermen boat before the communication problem happened. This shows that the ship with more than 40 years of age cannot be given shore leave to operate because of its potential to harm the crew. KD Perdana is one of the isolated cases that lost from the radar in a short period of time but it should not be neglected by the ministry on the outdated equipment. The military equipment quality is also a need to the country to ensure the security and sovereignty are guaranteed.

A country's military needs strategic, sophisticated and latest equipment. But the country needs a huge cost to provide the best equipment. Due to the shortage of budget Malaysia had to buy a secondhand aircraft, A4PTM Skyhawk which was a used United States' aircraft in 1988 . This was MAF's biggest purchase, but this aircraft had a limited technology and involved in crash that force Malaysia to stop Skyhawk service in 1994. Skyhawk has only been able to operate for six years and this is a big loss to the country. After Skyhawk's failure, the government bought Hawk 100 and 200 from Britain but this aircrafts also had many technical problems and involved in crashes. The unsatisfactory quality of the aircrafts raises problem in MAF management and loss to the country [59]. The country also lost a few of MAF members due to the accidents [60].

3.5 Privatisation of logistics division

The privatization policy by the government also involves MAF especially in logistic aspect. The usual practice by MAF is every aspect of logistics involves two large division which is MAF Logistics at headquarters and the logistic handled by every service branches namely, land, sea and air. The logistic support unit practice is seen giving work burden, need a large labour, large facilities for store and warehouse, budgeting and management [61]. This scenario influences MAF to move into privatization in accordance with government's privatization policy by privatising a few logistic aspects through cooperations with local and international companies. MAF logistics privatisation gives huge benefit to MAF because it enables MAF to save cost in the placement, logistics facility, management, MAF can focus on military logistic training and ensuring MAF to be in red alert. The question is, does MAF logistics privatization ensure MAF in red alert? Are the local and international companies appointed give maximum services to MAF? The readiness of logistics aspect is the main aspect

in ensuring the success of a military operation. With the weakness in logistics aspect it will give direct effect to the operation and fail the military operation. The government has involves the private sector in providing the product to the military [62].

3.6 The Purchase Not According to Real Needs

The country's military development especially in defence equipment acquisition has raised various questionable issues. Military development phenomena is a must to a country to ensure the security and sovereignty are guaranteed. Therefore, strategic, modern, sophisticated and latest equipment are the choice to any country in purchasing the equipment [63]. However, despite the words modern, sophisticated and strategic lie many questions which the guaranteed is a "fake" that the ability of the weapons system can be used for a long-term period [64]. Most of the equipment sales are one-off and involve a huge amount of cost. Although this purchase also involves after sales service including technology transfer. But the reality of after sales service is limited. According to Zuridan Muhammad (May 2009) [65]:

"The 'one-off' concept of purchase has been made by many countries and Malaysia is no exception. What the country received in a form of tank equipment system, ship and aircraft are a sophisticated version, but they have limited capabilities according to time and acquisition and technology advancement. If the system offered is the system made in the 80s, the supplier country may add some 'new' sophisticated features that is physically can increase the system capability level to overcome today's problem. The thing may not always true, but in a business world related to defence system, competition is high and sometimes the seller can say anything to get his product chosen."

In negotiation process, the question of life expectancy of the system usage is the main topic to the selling country and the buyer. For the seller, the longer life expectancy will be the main thing in giving options to the buying country, but at the same time there is a limit the buyer should know. This scenario is due to the technology contagion controlling factor to the buying country. Limitless offer will cause technology contagion to other countries that can cause global security threat. Uncontrollable high technology contagion will give threat. Chemical weapon technology, nuclear, biology, software and high technology computer system, nano-technology and others are aspects that can increase global security threat [66]. Second factor is due to the country or firm producer are trying to monopoly the system and technology in producing defence equipment and weapon. The firms that produce defence products are also observed by other countries so that it will not spread to other countries [67].

Among the problem involving MAF acquisition is top down procurement; equipment bought by the government that is not needed or not to the user wants which is MAF. Among them is the purchase of corvet ship level Laksamana. This ship was built in la Spezia, Italy originally for Iraq Navy. However, due to the economic sanction imposed on Iraq and the Gulf War, this ship cannot be delivered. Malaysia government bought four Kelas Laksamana ships in 1999 [68]. Among the problems during the acquisition of the ships is almost all of the weapon system and sensor used by the ships are different from what is in RMN inventory. Therefore, there is no equipment matches the ones in service. This caused spare parts, maintenance issue because there is no skilled staff and outdated. Outdated happened because the ship was built in 1980s but due to the issues mentioned above, they were only operated by RMN early of 2000 [69]. Until now, LAKSAMANA has been registered among the ships that will be deprived its accreditation in RMN 15to5 Transformation programme after almost 20 years in RMN service [70].

3.7 Low Level of Readiness

"To be in that state of readiness, the MAF logistic system has to function efficiently".

Readiness is the ability of a unit or team that is ready to execute an operation in a certain time. It is important because technology and war form is always expanding and it needs transformation and continuous development [71]. To measure MAF readiness it depends on Situational Force Scoring (SFS) which involves human resources, communication, mobility, shooting power, logistic and training. The measurements are based on the scale:

1. High Readiness – More than 90%
2. Medium Readiness – 80% - 89.9%
3. Low Readiness – 70% - 79.9%
4. Limited Readiness – 60% - 69.9%
5. Very Limited Readiness – 50% - 59.9%

KOD plays a role to ensure every asset and inventory always taken into consideration at all times. For example based on the military resources it needs to consider material and equipment help for the war. Same with the machine aspect which based on the current defence equipment, it will involve the cost of current spare parts. If it involves the decrease in inventory stock KOD will consider the decrease by putting the current readiness status. This scenario shows that MAF logistic system practice has a weakness. With the delay problem and management in MAF logistic governance it will give direct effect to MAF readiness. This is because MAF readiness level depends on MAF logistics management and function effectiveness [72].

Based on the previous studies, generally shows that MAF logistics aspect as the aspect that determine MAF and country's success in protecting country's security. Although there are studies and writings on the weaknesses on MAF logistics equipment quality but, there are no thorough explanation on the policy and government's stand in developing MAF logistics [73]. Other than that, the writings and studies also do not mention the effect to country's security by having outdated old inventory stock. This shows that the studies and writings did not focus on the logistic weakness towards the country's security [74]. MAF logistics weakness is not only the researchers' concern, but also by Chief and Head of Armed Forces themselves based on their speech. But it did not mention deeper especially on the country's security [75]. According to Amrit Inoh Bachan Sinoh (2009) in *Delivery of Military Vehicles Spares Into A Modern Battlefield Environment: Improvements For Effective Sustainability:-*

"A failure of delivering spares to the soldier on the ground at the right time would be a stumbling block in the ongoing operations with his stalled vehicle and finally him not being able to be mobilised effectively in a hostile environment and risk of being caught, tortured or killed by the enemy".

4. Discussion and Conclusion

In his effort on improving military logistics, Prime Minister Datuk Seri Najib Tun Abdul Razak said, the government decides that Dasar Keselamatan Negara that was drafted and approved on 11 January 2017 in accordance with Malaysian National Security Act (MNSA) 2016 to be revised at least once in every three years. This is to ensure the policies are consistent with NDP and if the policy is not consistent, then improvements and changes should be done accordingly. NDP will be the umbrella policy or overall and reference policy to the current policy related to the country's security such as Home Affairs Security Policy (HASP), National Defence Policy (NDP) and other policy that focus on the people's and country's harmony. Chief of Military Army, General Tan Sri Raja Mohamed Affandi Raja Mohamed Noor comments on a question, does MAF is more dependent to the asset, tools and logistics to move forward? He explains that military technology revolution is continuous and productions of modern and laest tools in accordance with the development. MAF must expand in accordance with the technology advancement so it will be relevant with the geostrategic region needs in the context of being an advanced and to be reckoned with.

Through Budget 2018, MAF will receive more than 20 new assets involving combat helicopters, combat ships and operation ships and obsersation aircrafts for MAF. RMN will receive six combat ships and four operation ships which are

in building progress other than planning the acquisition of Multi Role Support Ship. RMAF will receive four observation Maritime Patrol Aircraft to observe the country waters including South China Sea and Straits of Melaka. Expedite the modernization of MAF and getting new tools and weapon system so that MAF logistics organization can comprehensively plan and use the current logistics system to support it. Logistics assistance aspect can be enhanced so that it will be effective and efficient in giving quality services to MA. Logistics people should change, smart and focus on their tasks. Other than that, equipment maintenance should be planned meticulously with comprehensive and precise maintenance schedule. In the aspect of spare parts acquisition, it should be planned meticulously by making comprehensive and precise maintenance schedule for every equipment so that it will fulfill MA readiness.

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