

# HADR : Challenges of Civil Military Cooperation (CIMIC) in HADR in Malaysia

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**Abstract:** Over the years Malaysia has been experiencing major disasters and some of them were floods and landslides. Malaysia has been improving its disaster management system to be able to cope with handling disasters. Improvements and changes have been made based on the lesson learnt from disasters that occurred in the past. However, the government need to be more proactive in looking into the coordination mechanism involving all the agencies that assist in managing disasters. Civil-Military relation in Humanitarian Assistance and Disaster Relief is the essential dialogue and interaction between civilian and military actors in humanitarian emergencies that is necessary to protect and promote humanitarian principles, avoid competition, minimize inconsistency, and, when appropriate, pursue common goals. It provides for a spectrum of interaction between military and humanitarian actors, ranging from co-existence to cooperation. The efficiency of operations depends, to a large extent, on how well capabilities are used within the larger operation and how the relief operation is coordinated by other, often civilian, actors. The supplied military assets must be appropriate, determined by how well the capabilities meet the requirements. Lack of Coordination is one such example and most of the time when the expected collaboration is not as desired by the collaborator it often is expressed in the form of dissatisfaction. The objectives of this study are to analyse the role and responsibilities of Military cooperation in Humanitarian and Assistance Disaster Relief (HADR); to identify the challenges and implications for Civil-Military Cooperation (CIMIC) during the flood; and to analyse the gap between the Malaysian Armed Forces and other agencies conducted the Humanitarian Assistance and Disaster Relief Operation specifically in floods. Malaysian Armed Forces and other agencies such as the Malaysian Fire and Rescue Department, Royal Malaysian Police, Malaysian Civil Defense Department, Civil Defence Emergency Response Team, The Malaysian Public Works Department, National Disaster Management Agency, and other Non-Government Organizations have played their' professional role in ensuring that peace is achieved, and the development and advancement of the nation's economy, trade and financial aspect continues to grow.

**Keywords:** *Humanitarian and Assistance Disaster Relief (HADR), Disaster Management (DM)A, Malaysian Armed Forces (MAF), Civil and Military Coordinations (CIMIC)*

## 1. Introduction

Malaysia has had 65 years of peace and prosperity and achieved independence from the British in a peaceful transition on August 31, 1957. Since then, we have adopted the British Westminster Parliamentary system to imitate its administrative style and structure [1]. Its Malaysia has

adapted the Commonwealth system of the United Kingdom to a more regionalized system that works in a society with many different cultures, ethnicities, and religions. One of the systems it has copied is the Malaysian Armed Forces (MAF) rules and laws for the Armed Forces, which are supposed to be subservient to the civilian authority chosen by the people

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through democratic elections [2].

In the 65 years that the Armed Forces have been around, they have done their job to make sure that peace is kept and that the economy, trade, and financial aspects of the country continue to grow. So, the question comes up of whether, when there is peace and stability, a country's armed forces are kept in barracks and only deployed to provide assistance like floods, storms, humanitarian aid, and peacekeeping operations in troubled countries, where the MAF has made a big contribution to the United Nations Peacekeeping Operations [3].

From 1960 to 1962, Malaysia sent peacekeepers to Congo as goodwill to the UN and to the UK Commonwealth's former colonies [4]. Since Malaysia independence, MAF's efforts have led to big changes in Somalia, Bosnia-Herzegovina, Lebanon, and Cambodia [5]. This narrow line, which entails that the military forces be entrusted with such authority, has provided the civilian authorities with the trust and confidence that the troops are loyal to the current government.

Civil-Military Cooperation (CIMIC) is consistent with Sun Tzu's (The Art of War) and Clausewitz's (On War) conception of the nation-state (On War). Since the post-Merdeka era, Malaysia has observed the collaboration built over the years via implementing the concepts of KESBAN (Security and Development) and HANRUH (Total Defence). Therefore, CIMIC is not a new aspect of our country. It is common knowledge that the primary mission of the Malaysian Armed Forces (MAF) is to fight on the battlefield and train in peacetime however the MAF also has several secondary roles, including Peace Keeping Operation (PKO) and Military Assistance to Civilian Authorities (MACA), among others. During the COVID-19 pandemic, CIMIC cooperation was bolstered by combining diverse forms of expertise and Military and Civilian competencies. The impact is felt not only at various agency levels but also by the general public.

At times, both civilian and military scholars have maintained that the two are independent entities, while others have stated that the military is totally under the control of civilians. Therefore, important to investigate the extent of the involvement of civilians and to recognise to what extent does the control encompasses [6]. It is important to determine if their role should be focused more on budgetary and human resource-focused, with a civilian Secretary-General or Director in charge [2].

In recent years, civil and military organizations have played an increasingly important role in Humanitarian Assistance and Disaster Relief and recovery operations [7]. Modern-day disasters, with their severe shortages of resources, large numbers of casualties, crumbling infrastructure, massive destruction, and the resulting impact, necessitate the close cooperation of all the agencies involved in the response. Disaster response operations will be more effective if they have better coordination, communication, planning, and logistics in place [8].

Priority must be given to logistics in Humanitarian

Assistance and Disaster Relief if they are to be successful. Together, the military and civilian sectors must integrate military capabilities into a collective response to national demands and human needs. The government should examine all logistical and communication requirements to ensure the achievement of readiness during disaster management. [9].

In a military organisation, logistical support during HADR is crucial because it affects the success or failure of a military operation by providing resources for an infantry personnel during the operation. However, ensuring that the role of logistics support is successful, also depends on the sustainability of logistics support in the long run. In addition, the logistical support of an infantry battalion to sustain long-term operational tasks is extremely limited. The implication is that with the limited logistical support, infantry battalions are unable to perform their operations effectively due to the lack of logistics support resources involving vehicles, equipment, food and even accommodation. The current logistical support element indicates that an infantry battalion is difficult to carry out long-term military operations [10].

## 2. Problem Statement

The deployment of the MAF unit, especially the Army during the HADR Operation to disaster area is very significant to aid the main agencies responsible for the HADR operation. The assets of Army, such as assault boats, helicopters, ambulances and types of equipment able to support search-and-rescue operations effectively as well the timely arrival of soldiers and officers is essential to the course of events in a crisis. Nonetheless, this is frequently hindered by bureaucratic delays, such as status-of-forces arrangements. The effectiveness of activities is largely dependent on the utilization of capabilities within the wider operation and the coordination of the relief effort by other, typically civilian, players. The appropriateness of the delivered military assets is assessed by how well the capabilities suit the needs [10].

There are many factors regarding the relationship between civil and military relations that has to be considered in any disaster response and recovery. Such cooperation is needed for more effective work and quality. Lack of Coordination is one such example and most of the time when the expected collaboration is not as desired by the collaborator it often is expressed in the form of dissatisfaction [11].

Lack of information is another issue that constantly haunts an organisation. This is often due to poor communication that takes place between departments or individuals who fail to manage and deliver information. The goal and mission that have been expected would jeopardize because of a lack of information management. In addition to all of this, another constant problem is logistics and money constrain. In the event of failure, the conflict will worsen the relationship between the departments [12].

A disaster recovery plan can fail if it is overly simple or overly complex and it should be as concise and clear as possible while still containing essential information.

Documentation and information are the most essential components of a successful disaster recovery plan. This includes communication and recovery during a disaster. In other words, information must be managed prior to, pre, during and post disaster. Warfighting is the primary goal of militaries. This means that although some militaries have developed the specialised capacity to manage and respond to humanitarian crises, particularly natural disasters, many others still struggle to develop expertise in humanitarian response and have room to grow as far as their activities impact on human beings is concerned [11].

However, military capabilities, such as supplies, personnel, unique transportation capabilities like airlift and sealift, and the ability to build and repair infrastructure, can be helpful in humanitarian response. Organizations that deal with large-scale humanitarian crises focus on alleviating the suffering of those affected by them. Needs assessments, project implementation, and monitoring and evaluation are all areas where humanitarian organizations excel. There is a problem, however, with humanitarian organizations' ability to respond quickly [13]. In addition, in military operations, the quality of food supplies is very important to military personnel as they carry out challenging and demanding tasks while performing operational tasks.

### 3. Research Methodology

This research is qualitative research that produces descriptive data in the form of written and behaviours observed statistics. In addition, descriptive qualitative research aims to produce a comprehensive conclusion regarding particular events experienced by individuals or groups [14]. In this study, the author uses qualitative research focuses on conditions, practises, structures, distinctions or relationships, opinions, and processes that are ongoing or trending at a specific period in order to describe, explain, and understand current contemporary environment. This qualitative research uses a descriptive approach to analysis, which does not just stop at describing and explaining the conditions; it also involves the process of identifying and interpreting the data from the preceding section [15].

By using secondary data in its research, the data is obtained by conducting a literature study. This secondary data was obtained by the researcher through a literature study (library research) contained in several sources such as books, scientific journals, articles, papers, websites, magazines, electronic media, and documents related to the disaster studies.

Three major considerations must be highlighted regarding military responsibilities in HADR Operation initiatives, such as flood relief operations:

a. The military component is a subset of a larger mission. The military does not operate in isolation. They operate in a setting already populated by international and local people, projects, and systems. In a situation that also includes victims and humanitarian aid, civil society strengthening, democracy building, conflict resolution, development, and education, the military is only one of many actors [16].

b. Flood relief efforts are administered by civilians. NGO's and other civilian organisations control the relief effort for flood victims. The military should not attempt to regulate the work of NGOs and other civic relief organisations. The military should coordinate their humanitarian efforts with the appropriate civilian coordinating body in the concept of CIMIC. Civil agencies [17].

c. The military's role is to address humanitarian assistance concerns. When a military unit encounters a humanitarian situation, the proper approach is to notify the relevant military-civilian affairs coordinating organisation. Unless the military is asked for further assistance and is able to provide it, the military's mission is finished after the recommendation [17].

### 3.3. MAF Challenges in Conducting CIMIC in HADR Operation

The military's participation in flood relief operations might be brief and minor. Typically, the military will engage in the emergency process (immediate lifesaving) before the government and society transition to long-term rehabilitation and reconstruction [17]. The primary armed forces' missions are to provide security for disaster relief activities as a whole and to enable civil relief agencies to operate safely. The secondary objective is to aid in reestablishing normalcy in the situation. Humanitarian assistance; the protection of humanitarian assistance; the relief of flood victims and displaced persons; the execution of a peace agreement; and the restoration of order are the primary functions of the military. To minimise confusion, military personnel must refrain from posing as civilian assistance workers. Always maintain a clear boundary between military and civilian aid organization.

However, while the MAF conducting the secondary role in the HADR Operation, there are various of challenges that have been faced by this organisation, either those challenges that come along in its own organization or beyond the organization. These challenges came from vary spectrum and caused impacts on the CIMIC effort relatively and the execution of the HADR Operation at the time.

#### 3.3.1. Impact to MAF Operation Readiness

Situation Force Scoring (SFS) is a technique used to assess the operational readiness of the military, notably the Army. SFS is an approach that extends the state of the art of aggregate combat models by include combined arms, which are frequently absent from static force rating models. To be more specific, it will analyse two aspects of military readiness and capability. The military readiness is the ability of a force to provide a military response at a given time for a specified period, whereas the military capabilities are the ability to achieve certain goals based on measurable resources such as the number of soldiers and weapons, as well as intangible factors such as unit leadership, morale, and

cohesion. Units are able to provide the outputs for which they were intended.

The 2014 flood catastrophe disaster had a direct influence on the MAF's operational readiness, particularly the Army. Based on a comparison of the percentage of Army SFS between the years 2014, prior to the flood disaster, and 2015, following the disaster, as shown in Table 3.1 below, this influence can be seen. According to the Malaysian Army's SFS report for 2014–2015, there has been a decline in the proportion of some measurement categories, including training, mobility, communication, and logistics.

PERCENTAGE (%) STATE OF READINESS OF MALAYSIAN ARMY BASED ON SFS												
Year	Communications		Mobility		Logistics		Fire Power		Training		Total	
	Cap	Read	Cap	Read	Cap	Read	Cap	Read	Cap	Read	Cap	Read
2014	48	40	47	36	42	41	76	57	73	72	58.6	49.6
2015	39	33	42	31	42	40	73	52	62	61	55	46.4
2016	40	35	46	34	42	40	71	52	76	75	55.4	47.4

Note:  
 SFS – Situational Force Scoring  
 Cap – Capabilities  
 Read – Readiness  
 Full Mission Capable: 80% to 100%  
 Partial Mission Capable: 50% to 79%  
 Limited Mission Capable: 0% to 49%

Table 3.1: Percentage (%) State of Readiness of Malaysian Army Based on SFS

Source: SFS Report 2014–2016 Army Operations and Training Branch (2017)

From this report, it can be concluded that the percentage that has decreased consists of elements that have been committed to the implementation of flood relief operations, such as radios for communication, vehicles for mobility, various logistical support equipment, and training, that could not be used. All these factors are essential for the military to accomplish its core mission, which includes military operations and war preparation. It is quite difficult for the Army to achieve the position of partial mission capable of conducting their primary business, and it is even more difficult if this degree of preparedness is disturbed by the work that should be performed by other relief agencies.

### 3.3.2. Operations

The Army's main duty is to focus on military operations, such as defending the nation's sovereignty and fending off any outside dangers, both conventional and unconventional. The MAF's operational effectiveness must constantly be at a suitable level when carrying out this military action to guarantee that the nation's boundaries are always preserved and secured from any intrusion. It is difficult to go there because of limits and financial restraints. Performing flood relief operations is one of the factors that has hampered efforts to improve the military's operational capability since it would need the deployment of resources and personnel that should be employed for the main job. Still, it was utilised to complete the side duty while working on flood relief efforts.

After the Communist Party of Malaya put down their weapons and stopped fighting on December 2, 1989, the country didn't face any major threats from the outside or from

within for a few decades. But in 2013, a militant group from the Sultanate of Suluk invaded Lahad Datu and tried to claim Sabah territory as their own. This was a different kind of threat from the southern Philippines. Military operations to protect the country's borders are still going on. For example, there are border operations between Malaysia and Thailand in the northern part of the peninsula, between Malaysia and Kalimantan in Sarawak, and between Malaysia and Philippine international waters in eastern Sabah.

In addition to conducting military operations on Malaysian soil, the MAF is also active in conducting military operations abroad, like as United Nations peacekeeping missions. Lebanon in the Middle East and Mindanao in the southern Philippines are among the countries included in the MAF's peacekeeping mission assignments. In the framework of disaster relief operations, it is not a key mission for the military; rather, it falls under the purview of other relief organisations, such as the NSC and MDCF.

### 3.3.3. Trainings

Training is how the military maintains its level of physical fitness in preparation for battle. Peacetime training attempts to prepare formations, units, subunits, and individuals to perform their duties effectively and efficiently in times of crisis and war. Combat training is designed to prepare the military for the possibility of 'war' during times of peace. To achieve training goals and objectives, the military must employ adequate personnel, tactics, methods, and processes. Similar acts are conducted in battle and preparation, with the exception of achieving the mission and objectives of fighting. During times of peace, the military will give war training and aid other civilian organisations, such as flood relief efforts, that are addressing a domestic catastrophe.

The ultimate objective of military training is to prepare ground forces for the efficient and effective execution of military tasks under all operating conditions, in order to execute the military mission. The potential activities encompass a vast array of conflict-specific operations. These include non-military operations such as disaster aid and are not restricted to war operations. Training gives the means to cultivate, apply, and validate the traditional theory under constraints. It also provides outlets and chances for command and control training for commanders, leaders, and people.

The development of cohesion and faith in commanders, organisations, and doctrines requires that troops have good morale prior to engaging in operations; this is a key byproduct of successful training. Whether it be conventional warfare or insurgency warfare, the training doctrine of the military focuses primarily on operational duties throughout the fight. During times of peace, military troops will focus on training for war, and the training circle for the year has been developed and must be adhered to. There is no specific training for military personnel in disaster relief activities. As a result of engaging in flood relief efforts, the training schedule will be disrupted and the training aim for that year will not be met.

The majority of military troops are educated and groom for combat and war preparation. They are not specifically trained in flood relief operations, and such training is only offered through other relief organisations, such as MCDF and NADMA. It is inappropriate to employ the military to conduct these disaster relief activities since they lack the required expertise. In order for this process to be executed properly and efficiently, the appropriate individual must be assigned to the appropriate position. Without extra training, a well-trained combat force will not be prepared for the change in views, attitudes, operating tempo, and activities required for CIMIC appearance such as HADR Operation.

#### 3.3.4. Human Resources

The MAF's soldiers are the most precious asset of the MAF. They are composed of patriotic and loyal citizens who have sworn their allegiance to King and country under oath. Without soldiers, advanced weapons and equipment are ineffective, and MAF bases become ghost towns.

The main task of the armed forces is to protect the country's sovereignty from external threats by conducting operations to secure the country's borders, and a large number of personnel will be mobilised to fulfil this mission. When the Army is mobilised to conduct HADR operations, which is a secondary mission, it will have an indirect effect on the scarcity of personnel needed to complete a key task.

When involved in flood rescue activities, the troops can become fatigued, and their combat readiness is diminished. The current quantity of troops is optimal for protecting the nation's sovereignty, but the MAF can lose a certain number of personnel if they are diverted to perform the tasks of other relief agencies, such as flood relief operations, at the expense of their main operational roles.

#### 3.3.5. Logistics

Logistics is the lifeblood of military forces engaged in operations, allowing them to be transported and maintained to carry out their duty. Combat formations can operate autonomously for a limited time. The military employs an integrated logistics support system to sustain itself. It ensures deployed forces have access to an efficient and secure combat service support network.

The notion of logistics provides a solid foundation for establishing and implementing sound logistics and combat support services. The MAF's existing military assets and equipment can only be used for military and combat operations. In undertaking flood relief operations, the military lacks specialized assets and equipment such as smaller and more suited amphibious vehicles, civilian safety jackets, and rubber boats. In addition, some of the assets and equipment utilised in flood rescue efforts will sustain damage, but there is no additional money for repair and upkeep. Indirectly, it will impact the MAF's operational readiness to accomplish the primary mission.

Following the flood crisis in 2014, the MAF came to the

realisation that the armed forces needed specific equipment to carry out flood relief operations. In addition to not being appropriate, using war stockpiled assets and equipment to carry out relief operations may result in a drop in operational preparedness. The MAF will run into the issue of resource deficiency if this problem is not handled properly. The MAF, especially the Army, has no trouble carrying out such operations as long as the government provides them with adequate funding and the right tools.

#### 3.3.6. Insufficient Budget Allocation

One of the most crucial factors that must be taken into account in disaster management is money.funding. The best services for victims may be delivered with a sufficient funding allocation, which will also boost the effectiveness of relief efforts.

MAF participation in flood relief activities is a duty that must be carried out in keeping with its purpose to protect the country's sovereignty and its significance from external threats and to support public authorities in achieving national peace and prosperity. However, while it won't stop them from carrying out those activities, the lack of a specific budget allocation in the MAF, particularly the Army budget for flood relief operations or any calamities, can make things more difficult. Any expenditure made to carry out such operations is to do so by using funds already allotted to a budget by setting aside money or synchronising the priorities of a Expenditure Plan (EP).

The allocation that is used largely to carry out duties effectively is known as an operating expense (OE). The government will need to allocate an additional annual budget allocation if expenses are incurred to carry out ancillary responsibilities like flood rescue operations. The MAF spent RM5.9 million on flood relief activities in 2014, which included charges for things like damage repairs, fuel and ration usage, medical care, and other unforeseen costs. Unfortunately, despite applying to the Ministry of Finance, no extra funding allocation or refund was received the following year.

It can be seen that after the flood disaster in 2014, when the Army realised they needed more money to do unexpected things like flood relief, they asked for more money in the next year, which was 2015. During OP MURNI 2014/2015, the Malaysian Army utilised Existing Policies (Dasar Sedia Ada) to fund operating expenses. These expenditures that were not included in the Procurement Plan had an indirect impact on the expenditures that were scheduled for that year. Based on prior disaster relief operating expenses, the sum allocated is not particularly large, and the Army was forced to absorb it via their own OE. The entire budget allocation obtained was not as requested, which will have an indirect impact on the Army's operational readiness.

Almost every year, the MAF, particularly the Army, faces a supply shortfall. The problems discovered will be addressed in the same year. A department-approved Procurement Plan is required when applying for the next/next

year's budget. As a result, forecasting a disaster for next year is difficult because there is no guarantee that one will occur. As a result, no special allocation request will be made for next year because there is no guarantee of disaster.

It was reported that the MAF served as the primary relief force during the 2014 flood disaster, as well as in Penang in 2017. Unfortunately, the majority of the funds allocated for natural disaster management was allocated to other civic relief organisations, such as the MCDF. In contrast, the MAF is the relief organisation that mobilises the greatest personnel and resources. This issue requires examination, and if the military contributes the most to these flood relief operations, the MAF should receive the majority of the financial allotment.

In addition to excessive red tape and bureaucracy, the financial issue is also hampered by excessive red tape and bureaucracy. In some instances, MAF must obtain and submit an emergency request for an increased budget allocation. Unfortunately, it must through too many procedures and address the problem of bureaucratic hierarchy. Red tape syndrome is sometimes an impediment to the MAF's ability to conduct more effective flood relief efforts. The MAF must adhere to strict protocol, and so much red tape must be traversed, that no shortcuts or special treatment are granted, despite our justification to the Financial Division of the Ministry of Defense (MINDEF) that we are in critical situation. Typically, the Financial Division of MINDEF will state that the MAF must utilise its existing financial allocation and resources to perform such operations. When the government assigned the MAF with additional obligations, like as flood relief activities, it did not provide advance notification. Sometimes, MAF does not receive what we require at the desired time.

### **3.4. Gap Between the Malaysian Armed Forces and Other Agencies**

Under current disaster management procedures, there are two primary mandate holders: the National Security Council, through NADMA and NSC Directive 20, and the Malaysian Civil Defence Force, under its Civil Defence Force Act 1951. The 2014 flood relief operations demonstrated the MAF's significant planning and collaboration with the Federal Government, State Government, Local Authority, and other civil relief organisations such as the MCDF, Police, Fire Rescue Department, and Volunteer Force.

Failures and challenges in decision making, in disaster management, cooperation between organizations (intra and inter) is essential to avoid uniformity in action. However, we find that such cooperation is very difficult to establish because there are obstacles (limitation) faced such as the existence of different agendas and the interests of certain departments. Failure in coordination one of the causes of failure in disaster management is the failure to coordinate the responsibilities of all departments involved [11].

In the recent flood disaster it can be seen that important national disaster support operations can be hampered by the

lack of an integrated legal and domestic policy framework. Legal issues are often overlooked as part of preparedness planning for national disaster response mechanisms. These concerns have increased the need to ensure that legal issues are anticipated and managed in advance. There are currently no national laws for disaster management. With a comprehensive national law to manage this disaster it will facilitate mobilization and rapid response and will contribute to good coordination and exchange of information by all respondents. There were a variety of different respondents from government officials and non-governmental organizations [8].

In conducting HADR Operation, which mean involving various of agencies and department, required a lot of synergising and synchronisation to achieve the optimum goal of the operation. comes from the different uniform and background required a lot of initiative and understanding. Every disaster relief agencies have its own idealism and intent while during deployment in the disaster area of operation. The gap between the Malaysian Armed Forces and other agencies conducted the Humanitarian Assistance and Disaster Relief Operation, specifically in floods to be faced to deal with natural disasters are early warning, preparedness, response, recovery and mitigation. Among the challenges are as follows:

- a. Lack of coordination.
- b. Lack of policy objectives.
- c. Failure to identify all proposals.
- d. Absence of organizational and management components.
- e. Deferred action.
- f. Lack to establish effective communication.
- g. Failure to accept criticism.
- h. Lack of approach to deal with media.

In disaster management, cooperation between agencies and organizations is essential to avoid uniformity in action. However, we find that such cooperation is very difficult to establish because there are obstacles (limitations) faced such as the existence of different agendas and the interests of certain departments. Failure in coordination one of the causes of failure in disaster management is the failure to coordinate the responsibilities of all departments involved. autonomously for a limited time. The military employs an integrated logistics support system to sustain itself. It ensures deployed forces have access to an efficient and secure combat service support network.

### **3.5. Idea to Enhance Inter-Agencies Collaboration**

Nonetheless, seven years after the foundation of NADMA, NSC Directive No. 20 has not been changed. Since there have been no big disasters since the 2014 floods, the overall efficiency of NADMA as an organisation to coordinate inter-agency collaboration during disasters has yet to be determined. Nonetheless, there are a number of initiatives that can be taken to enhance interagency collaboration.

### 3.5.1. Revision of Directive No. 20 of the NSC

Since the inception of NADMA, this directive has not been amended as the primary national guideline for disaster or crisis response. Consequently, it is crucial that a newly amended directive be issued outlining the function and responsibilities of NADMA, as well as its jurisdiction and power in relation to other authorities during catastrophes. This is also to guarantee that all agencies are aware of NADMA's leadership position in disaster management and will work together to ensure a rapid and effective response during times of crisis.

### 3.5.2. Integrated Training

During times of peace, more exercises involving HADR actions amongst agencies must be planned, organised, and completed. This is to ensure that all agencies are prepared and know precisely what to do in the event of a natural disaster. Training must be disaster-specific, taking into account the response of individual authorities to various types of catastrophes such as floods, landslides, etc.

### 3.5.3. Optimisation of Resources

To overcome resource constraints, NADMA should utilise decision-making tools to determine the priority of resource allocation and acquisition. One such instrument is the Risk Based Resource Allocation Matrix, which allows decision-makers to categorise risks in accordance with their likelihood of occurrence and severity of impact. From this vantage point, NADMA can advise the government on the optimal utilisation of all agencies and their assets during a disaster, including the coordination of deployment between agencies to avoid redundancy and increase efficiency.

### 3.5.4. Sharing of Information

In a combined setting, a Common Operating Picture (COP) will simplify the sharing of information in real time between agencies. Therefore, a temporary or permanent Information Fusion Centre should be formed during catastrophes to gather, analyse, and transmit information back to the authorities. This will improve the sharing of information via inter-agency networks at the federal, district, and state levels.

### 3.5.5. Financial Investment

The Malaysian government must invest more in key agencies such as NADMA and MAF to improve their skills to support HADR activities. This comprises the acquisition of new assets to replace ageing assets in addition to the acquisition of equipment that will improve overall capability. In all procurements, a dual-function approach must be taken, prioritising the primary duty of these agencies while recognising the secondary role they must play during disaster management.

### 3.5.6. Sophisticated Planning

Most planning focuses more on issues of "emergency response" and "preparedness" and does not focus on recovery and repair efforts. Planning on paper and referring to past action plans (post-mortem) are not considered. Most public officials are not knowing the content of an action plan or making decisions based on existing guidelines [6]. Planning is seen as the final outcome rather than as a reference material and basis for discussion and implementation.

## 3.7. Role And Responsibilities of Civil and Military Cooperation in Humanitarian and Assistance Disaster Relief (Hadr)

This part will discuss the role and responsibilities of Civil and Military Cooperation (CIMIC) in Humanitarian Assistance and Disaster Relief (HADR). This includes the connection between Government and Non-government Organization in assisting the disaster in Malaysia. First, it will elaborate about the Disaster Management in Malaysia and then the flow and Standard Operating Procedure (SOP) of the agencies in handling the disaster.

### 3.7.1 Disaster Management

According to [18], who discuss in depth the significance of the emergency management team in safeguarding communities in their book "Introduction to Emergency Management" (2016). The history of disaster management is thoroughly covered throughout the book, including dangers and the four emergency management phases of mitigation, preparedness, response, and recovery. The focus of this book is on climate change as a significant threat to disaster management, and it analyses social media as a valuable resource for disaster management. It also provides a complete summary of current legislation and workflows [18].

Introducing disaster and emergency management courses in colleges and universities is a top priority for emergency management at all levels. Such projects can strengthen multidisciplinary abilities, benefit the school system, and encourage a pro-active approach to catastrophe management. Disaster and emergency managers become valuable members of society and community resources. Lessons from past disaster relief operations reveal that competent disaster management with significant logistics help is needed to save lives, property, and infrastructure.

Since World War II, when the first sociological study was done to analyse how communities react to loss and destruction, disaster management research has evolved into what it is today [19]. In the book "Handbook of Disaster Research," new approaches to disaster management have been found, and suggestions have been made to help researchers overcome their limits [20]. The manual also explored in depth what a disaster is, its meaning, and the vocabulary associated with it, as well as disaster management, namely the logistical aspects of management in

disaster relief efforts. This definition was also brought up by [21], who examined disaster management in Malaysia.

Natural disasters are a natural phenomenon that occurs directly or indirectly disrupts human life. In this case, natural disasters can cause loss to humans in terms of property and loss of life. Floods are natural disasters that are given attention because they threaten the lives and economy of the people of this country. According to a study by the World Meteorological Organization (WMO), floods are the third-largest natural disaster that has claimed many lives and damaged property. The problem of floods in the country caused by monsoon floods and flash floods will continue despite various structural and non-structural measures implemented by the government to reduce its impact. With the increase in population and development concentrated in basins and river valleys that are easily flooded, floods are very difficult to avoid. The frequency of floods has increased due to land use changes where drainage systems in low-lying areas are unable to drain heavy rainfall and drainage systems that experience sedimentation due to development [1].

### 3.7.2 Involvement of Military as CIMIC in HADR Operation.

Civil-Military Cooperation is a military phrase with multiple meanings, although it generally refers to the interaction of military actors with civilians for military objectives. Civil-Military Cooperation is defined by NATO as the coordination and cooperation in support of the mission and connecting between the NATO Commander and civil actors, such as the national population and local authorities, as well as international, national, and non-governmental organisations and agencies. Civil-military cooperation is the military role by which commanders link with civilian agencies functioning in a theatre of operations, according to the doctrine [22].

Although it is the obligation of national governments to safeguard and aid citizens residing on their territory when natural disasters occur, governments are frequently weakened by disasters and lack the power to respond appropriately. In other instances, this results in foreign actors substituting for governments, which paradoxically has the consequence of undermining national capabilities. The global humanitarian system is currently strained thin in order to respond to current crises, and it will be stretched even farther in the future.

In order for the military and civilian components to work together, traditional military capabilities must be incorporated into a collective response to human need. Beginning with the long-term objective of improving human security and creating the circumstances for societies affected by conflict to transition back to peaceful and stable systems, civilian and military actors share this objective. When troops stepped in to fill in deficiencies in civilian skills, civil-military partnerships were first established in the field. States are now creating their own doctrines defining the nature of civil-military cooperation in response to the increasing complexity of operational requirements. States are

increasingly recognising the strengthening working relationship between military and civilian entities. The three main components of civil military cooperation in stability operations are support for the force, help to the civilian environment, and liaison between the military and all civilian actors in the operation area.

According to [23], This military term refers to the interaction, coordination, and cooperation that take place between military forces, civilian organisations, agencies, and in-theater civil influences in order to achieve an effective response in the full spectrum of military operations. It also refers to mutual support, joint planning, and constant information exchange at all levels [23].

The various parties recognise the need for cooperation and coordination but have different ideas about reacting to the new circumstances. This started a discussion on civil-military relations, and one of the main terms was "civil military cooperation.". In the discussion the different actors used in various contexts with differing implications. This has been referred to as Civil-Military Cooperation, and thus, it has become a fundamental policy and operational concern for all engaged players. Particularly, the NGO community has and continues to use the term military engagement in humanitarian aid' to refer to such activity. The discussion is on the altered usage and function of the military. In so-called complex emergencies, the military has been assigned a variety of tasks that are not always necessarily military in nature. Due to its political influence, the military can never be viewed as independent and impartial, a potential threat constantly cited by the NGO community [24].

Any link between unbiased humanitarian efforts and military goals, whether actual or just perceived, increases the risk of turning humanitarian workers into perceived enemies and endangers their personal safety. The effectiveness of humanitarian help may be lowered or even rendered impossible by the blending of mandates. Additionally, there was strong opposition within the humanitarian organisations to the idea that humanitarian aid is secondary to the military. The humanitarian society is adamant that the principles of independence, neutrality, and impartiality must govern the distribution of help. The term "Civil-Military Cooperation" has sparked a heated debate about the interaction between the civilian, humanitarian, and military organisations.

In initial stage, all stakeholders have their own method and principles. The NGOs represent a very diverse and eclectic group, with various fundamental presumptions, goals, and working styles. Given this, the question is whether it is practical to group all the various facets of the interaction between military and humanitarian organizations under a single umbrella phrase. Since it wouldn't be able to consider all viewpoints, this appears to be neither practicable nor desirable. Such an endeavour would yield the lowest common denominator, which could not capture all facets of the intricate connection.



### 3.7.3 Participation of Military in CIMIC in Flood Relief Operation.

Unquestionably, military engagement deployment in flood relief missions has had a significant impact on the effectiveness of such operations. As highlighted by Ajaya Kumar (2015), due to the nature of their training, members of the armed services are continually prepared and equipped to be deployed in the worst environments and situations. In addition to military training, the MAF has an equally crucial secondary function. It is also tasked for providing Military Aid to Civil Power (MACP) to help civil agencies with law enforcement (where necessary), maintaining public order, and disaster relief operations that may plague the nation (Ajaya Kumar 2015).

As per raised up by [1], the essential role the MAF plays in ensuring the effectiveness of disaster response in a catastrophe-affected area. In addition, they recognised public expectations, personnel morale, proper training opportunities, and humanitarian operations as methods for diversifying the role and talents of the armed forces as justifications for a greater military role in disaster management. The MAF has always been trained to deal with logistical issues, supplies affected by inclement weather, and flooded roadways.

[25] explained the elements affecting the Infantry Corps of the Malaysian Army's flood response activities. They analysed aspects such as command and control, coordination, equipment and logistics, human resource, and communications that influence the Infantry Corps's ability to respond effectively to flood disasters. They highlighted that the Infantry Corps of the Army is prepared to respond to natural disasters. They also emphasised the need for the state government and Infantry Corps of Army to comprehend the challenges behind efficient disaster response in order to design and distribute a standardised operating procedure to all relevant entities.

### 3.7.4 Mandate for HADR Operations

In 1972, the government of Malaysia established the Natural Disaster Management and Relief Committee in response to flood risks. The objective was to coordinate flood relief efforts at the federal, state, and local levels to limit flood damage and prevent loss of life. To handle the majority of projected catastrophic disaster situations, Malaysia has an integrated disaster management system. The NSC Directive No. 20: The Policy and Mechanism of National Disaster Management and Relief has this integrated framework [26]. The NSC Directive No.20, which provides a legal framework for federal or state authorities to implement an integrated action plan focused on handling disaster emergency, was originally included in a list of directives issued under the Emergency as the only establish law actions supported by the parliament.

The National Security Council (NSC), also known by its Malay abbreviation MKN (Majlis Keselamatan Negara), is the government body in charge of overseeing flood relief

efforts in Malaysia. Following the December 1993 collapse of the Highland Towers apartments in Hulu Klang, Selangor, the Malaysian Cabinet resolved on May 18, 1994, to establish a disaster management apparatus, placing it under the NSC. As a result, the National Disaster Relief Management Mechanism directive and policy were developed by the NSC.

The Prime Minister, who also serves as the Chairman of the Central Disaster Management Committee, issued the NSC Directive No. 20 as an executive order. It relates to disaster operations and outlines the rules, responsibilities, and functions of the relevant agencies concerned. It is examined in light of the disaster's complexity, pattern of occurrences, and changing environment. The directive outlines the process that must be performed before, during, and after the disaster for the Disaster Management Mechanisms. Each organisation tasked with managing disasters is in charge of doing its duties in accordance with the directive. Additionally, the order serves as a preventative measure against duplication of effort and waste, confusion, dispute, and overlapping responsibilities by various agencies.

In accordance with NSC Directive No. 20, organisations involved in disaster management, relief efforts, and rehabilitation must coordinate their efforts in a methodical manner. The NSC of the Prime Minister Department issued this order in 1997. There were 13 appendix and 29 titles in total. NSC Directive No. 20's main focus is on providing policy guidelines for disaster management and rescue on the ground after a disaster event occurred. It also serves as an administrative tool for determining the roles and responsibilities of the organisations participating in disaster response [27].

According to NSC Directive No. 20, the state government and district government, led by the State Secretary (SS) and District Officer (DO), are primarily responsible for disaster relief efforts at the state level, including flood assistance. To help the state government, members of federal agencies like the Royal Malaysian Police (RMP), Fire and Rescue Department, Malaysian Civil Defence Force (MCDF), Volunteer Force (RELA), and other states' local law enforcement agencies that are approved by the committee head are included in the membership of each State Disaster Management or District Disaster Management committee. The participation of the MAF is to focus on its main responsibilities to the state security council, which are to safeguard the state's and the nation's borders from any security threats, support the RMP in maintaining the state's internal stability, and only deploy within the rule of Public Order (Preservation) Act 1958 (Revised 1983).

The MCDF is one of the relief organisations that has been given legal authority to manage disasters ever since the MCDF Act 1951 was amended in 2016. In the past, it helped in disaster relief efforts. MCDF serves as the Secretariat for Disaster Management and Relief Committee (DMRC) at the state and district levels as well as responders in times of disaster [28].

This means MCDF leads HADR operations, including

flood relief, and not the military. In August 2015, the National Disaster Management Committee, chaired by the Deputy Prime Minister, suggested appointing MCDF as the Secretary of the Disaster Management Committee at the state, district, and community levels. The Prime Minister's Cabinet Committee Meeting on 8 September 2015 nominated MCDF as the Secretary of Disaster Management Committee at the state, district, and community [28].

This decision was made at the Deputy Prime Minister's 1st Executive Meeting on Disaster Management and Relief on 5 Nov 2015. (Chairman of the National Disaster Management Committee). MCDF's state and district secretary roles follow NSC Directive No.20. MCDF coordinates the provision of Fund of National Disaster Relief Trust (FNDRT) help to disaster victims based on FNDRT committee rules. MCDF serves important roles in disaster relief management and flood relief operations, not the military organization [28].

The MCDF also has a team that is equipped with the necessary rescue tools and is strong in qualified personnel. This group will often be in charge of the rescue efforts during a natural disaster. The Malaysian government will be better able to assist the regions of the nation that are most vulnerable to hazards as a result of the new NADMA. Small agency divisions have been positioned at the village or community level. The NADMA will be led by senior government officials. The MCDF will be in charge of the mini-disaster management units, concentrating on the Sabah and Sarawak disaster-prone states on the east coast of Peninsula Malaysia. Natural disaster management and coordination now fall within the purview of this new organisation [28].

### 3.7.5 HADR - Flood Relief Operations

After the 2014 flood tragedy, the NSC devolved coordination duties to the NADMA. NADMA is an organisation and administration of the Department of the Prime Minister's resources and duties for dealing with and coordinating all humanitarian aspects of emergencies (preparedness, response, mitigation, and recovery). The purpose of establishing NADMA is to coordinate relief and management operations, to help decrease the detrimental effects of all hazards, including natural disasters, that occur at the national level, and to support international humanitarian efforts.

The NADMA has served as the disaster management hub. It was established on October 2, 2015, under the Prime Minister's Department, and it carries out disaster management directives from the National Security Council. The management of a disaster also falls under the purview of the Ministries of Home Affairs, Health, and Housing, Urban Wellbeing, and Local Government. The Royal Malaysian Police (RMP), Malaysian Fire and Rescue Department, Malaysian Civil Defence Force (MCDF), Ministry of Health, and Malaysian Maritime Enforcement Agency are among the organisations participating in disaster management (MMEA).

There were also some non-profit organisations that

participated in emergency/disaster management, like the Malaysian Red Crescent Society and St. John Ambulance. Following are the principal NADMA branches:

- a. Policy Planning Branch.
- b. Operation Management Branch.
- c. Post Disaster Management Branch.
- d. National Disaster Command Centre - NDCC.
- e. Special Malaysia Disaster Assistance and Rescue Team

(SMART) - internationally known as SMART, is a Disaster Relief and Heavy Urban Search and Rescue (USAR) Task Force. The SMART task force is a United Nations International Search and Rescue Advisory Group (INSARAG) certified Heavy USAR in June 2016.

The flood disaster management agency of Malaysia is based on NSC Directive No. 20 and its Regulations. The objectives of the Disaster and Land Relief Management Policy and Mechanism are described in these documents. The Directive also specifies the range of responsibilities and the approach each agency will take to disaster management. The National Disaster Management and Assistance Committee, which comprises numerous federal, state, and local entities, is coordinated by the council. The Disaster Management Structure is depicted in Figure 3.1.

In 1972, the government of Malaysia established the Natural Disaster Management and Relief Committee in response to flood risks. The objective was to coordinate flood relief efforts at the federal, state, and local levels to limit flood damage and prevent loss of life. To handle the majority of projected catastrophic disaster situations, Malaysia has an integrated disaster management system. The NSC Directive No. 20: The Policy and Mechanism of National Disaster Management and Relief has this integrated framework [26]. The NSC Directive No.20, which provides a legal framework for federal or state authorities to implement an integrated action plan focused on handling disaster emergency, was originally included in a list of directives issued under the Emergency as the only establish law actions supported by the parliament.

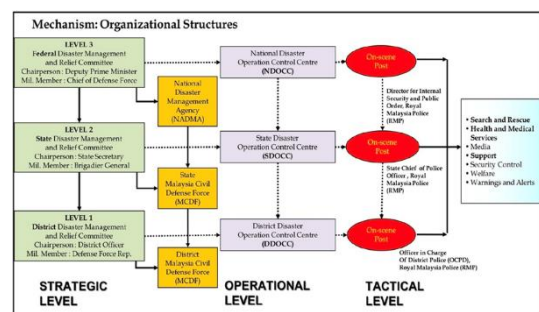


Figure 3.1: Disaster Management Structure

Source: Malaysia Disaster Management Reference Handbook (2016)

### 3.7.6 Level of Disaster Management

Unquestionably, military engagement deployment in flood

relief missions has had a significant impact on the effectiveness of such operations. As highlighted by Ajaya Kumar (2015), due to the nature of their training, members of the armed services are continually prepared and equipped to be deployed in the worst environments and situations. In addition to military training, the MAF has an equally crucial secondary function. It is also tasked for providing Military Aid to Civil Power (MACP) to help civil agencies with law enforcement (where necessary), maintaining public order, and disaster relief operations that may plague the nation [29].

While keeping their primary competencies, government agencies are accountable for various areas of Disaster Risk Reduction (DRR). The District Office is given important tasks in disaster management and relief at the state level. The features and scope of the event, as well as the extent of the afflicted areas, will determine if the particular executing committee is activated. In any event, the District Office is the primary implementing organization on the ground to guarantee that responses are coordinated, that there are enough assets and human resources, and that communication with the media is established. Every disaster management committee is responsible for certain things. Disaster Management shall be conducted according to the following stages:

- a. Level I Disaster Management is the is a local incident that is manageable and poses little risk of spreading. Therefore, the District Committee ensures coordinated operations, including the availability of assets and personnel.
- b. Level II Disaster Management is a more serious incident that affects a larger area (two districts) and has the potential to expand. As necessary, the state provides the district with financial aid, extra assets, and human resources.
- c. Level III Disaster Management is complex and widespread, affecting more than two states. The Federal Government defines the national policy, financial assets, and human resources for disaster management. Figure 3.2 depicts the three disaster management tiers.

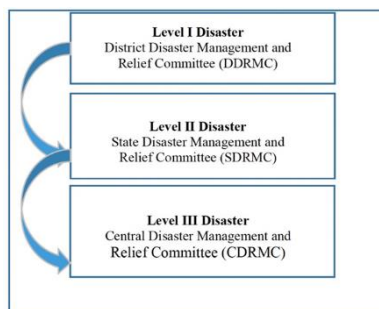


Figure 3.2: Level of Disaster Management

Source: Malaysia Disaster Management Reference Handbook (2016)

### 3.7.7. Collaboration Between Agencies

During the flood relief mission, the military coordinated, interacted, and collaborated with various security agencies as well as the local population. NSC Directive No. 20 authorised the implementation of the disaster relief operation. The following organisations are active in disaster relief operations in Malaysia:

- a. Malaysian Armed Forces (MAF).
- b. Royal Malaysian Police Department.
- c. Malaysia Fire and Rescue Department.
- d. Special Malaysia Disaster Assistance and Rescue Team (SMART).
- e. Emergency Medical Services.
- f. Malaysian People Voluntary Alliance (RELA).
- g. Civil Defence Force.
- h. Malaysian Red Crescent Society (PBSM).
- i. St. John Ambulance Malaysia.
- j. Other Non – Government Organizatio(NGO)agencies.

NADMA under the supervision of the Prime Minister Department was established after the decision made by The Ministers Council on 26 August 2015 due to series of natural disasters that we had endured. [30] Aminuddin bin Hassim (2021) shares the agency’s objective is to strengthen the planning and execution during a disaster to ensure it is managed with better efficiency and effectiveness and to reach all level of the community especially the victims of a disaster. The collaboration between all agencies before, during and after a disaster event will improve [31].

MAF is one of the organisations listed above directly active in flood relief operations. Currently, the disaster’s occurrences have exploded, necessitating the deployment of a lot of military assets to fill in the gaps that civil agencies were unable to fill. Due to their extensive structure, ample equipment, well-trained troops, high mobility, and dependable help when the situation calls for it, the military deployment had demonstrated an effective response to disasters. During the 2014 eastern floods, the MAF optimally deployed a huge number of military assets and troops in response to the deteriorating flood situation, which rendered all activities impossible. The deployment of land, air, and water equipment by the MAF was determined to be acceptable for the disaster-affected areas, as these assets may be prepared to travel in any scenario, weather, or geographical area.

## 4. Summary

The Malaysian Armed Forces, like any armed forces in the world, is a necessity force for the defence of the sovereignty of Malaysia and acts as a deterrent towards any other nation with hostile intent towards it. It is responsible for safeguarding the nation against external threats. Therefore, in peacetime, the MAF is expected to train for war regardless of the peaceful environment that exists among neighbours who border the nation. As such, substantial time is spent in training to ensure the state of readiness and competencies are

at their peak at all times to meet any form of threat imaginable and plausible. It cannot be denied that the military is one of the few organizations that are capable of responding quickly and efficiently to meet a major disaster and are capable of conducting prolonged relief operations at a moment's notice by virtue of how it is organized and structured. However, it should be borne in mind that the MAF is not the lead agency when it comes to disaster relief operations but merely play a supporting role to the civil authorities in carrying out humanitarian assistance. HADR operations differ from normal military operations and thereby require a different form of training to equip troops to possess the competency to meet and carry out their task. Information is also an essential part of the criteria any military commander requires in carrying out their task.

Military operational readiness is a strategic component that must always be maintained to guarantee the ability and capability of the armed forces to confront any danger, whether it comes from the outside or from within. Army-specific operational readiness metrics, such as those for communication, mobility, logistics, human resources, weaponry, and training, are used to assess MAF preparedness. MAF level of operational readiness was somewhat impacted by the military's participation in disaster relief operations in the concept of CIMIC, which is not their core duty.

Financially speaking, there is a sizable discrepancy between the Army's requested resources and what they actually received; thus the government should think about giving the Army more money to handle unanticipated disasters like floods. For each organisation to understand how they fit into the solution to the flood problem, collaboration with other organisations like the NADMA needs to be stepped up. The government should also work to create unique disaster management plans that will only be employed in the event of specific calamities.

When a country is affected by any disaster, the government will work to organise different relief organizations to carry out relief operations to provide aid and rescue to the victims. The Government, through the NSC, formed NADMA as the primary organisation in charge of coordinating and managing any catastrophe situations that impact the country, particularly floods, NADMA will oversee organizing flood relief efforts carried out by all relief organisations, including the police, MCDF, local authorities, fire rescue departments, and volunteer forces, or RELA in Malay acronym. According to the MCDF Act of 1951, the primary organisation in charge of carrying out disaster relief operations is the MCDF.

Nevertheless, despite the two most chaotic floods that the nation experienced in 2014 and 2017, the military contribution on behalf of CIMIC elements to HADR efforts may be observed in the aftermath, the government continued to rely extensively on the military, despite the fact that relief operations are not their primary responsibility nor are they required by law to be carried out. The military's mobility and capability to provide essential infrastructure to support humanitarian assistance are two of the key reasons why it is

used during flood relief operations. The military's operational readiness will be indirectly impacted by the mobilisation of troops, equipment, and assets from the primary mission or war stockpile once they are involved in flood relief operations, which is their secondary task. This deployment will also make use of operational expenditures or the current budget.

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