



HUMANITARIAN ASSISTANCE AND DISASTER RELIEF IN ASEAN (MALAYSIA, SINGAPORE
AND INDONESIA)

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ABSTRACT

This paper is to determine the perspective of Humanitarian Assistance and Disaster Relief from Malaysia, Singapore, and Indonesia point of view. Furthermore, this paper is to determine the significant efforts of Humanitarian Assistance and Disaster Relief frequency focuses on Malaysia, Singapore, and Indonesia. Thus, to offer suggestions in which enhancing information sharing, interoperability, trust and relationship between Malaysia, Singapore, Indonesia, and ASEAN. This study utilises a set of interviewing and a library research design; where this study was referencing through several interview to Subject Matters Expert, necessary documents, acts, regulation, and policies focusing on the humanitarian assistance and disaster relief, services magazines, journal, article, National Disaster Management Agency sources, and news. Published materials such as relevant research reports, articles, books, annual reports have been reviewed to support the secondary data. This study is expected to give an understanding on the perspective of Humanitarian Assistance and Disaster Relief from Malaysia, Singapore, and Indonesia point of view. Moreover, to give understanding on the significant efforts of Humanitarian Assistance and Disaster Relief frequency focuses on Malaysia, Singapore, and Indonesia. Lastly, this study will provide suggestions in which enhancing information sharing, interoperability, trust and relationship between Malaysia, Singapore, Indonesia, and ASEAN.

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LIST OF ABBREVIATIONS

ACDM	- ASEAN Committee on Disaster Management
AADMER	- ASEAN Agreement on Disaster Management and Emergency Response
AEGDM	- ASEAN Expert Group on Disaster Management
AFDRU	- Austrian Forces Disaster Unit
AHA Centre	- ASEAN Humanitarian Assistance Centre
ANC	- Andaman Sea and Nicobar Command
APC-MADRO	

APEC	- Asia Pacific Conference on Military Assistance to Disaster Relief Operations
API	- Asia-Pacific Economic Cooperation
ASA	- Air Pollutant Index
ASEAN	- Association of Southeast Asia
ASPAC	- Association of Southeast Asian Nations
ASEAN-ERAT	- Asian and Pacific Council
ASEAN-US	- ASEAN Emergency Rapid Assessment Team
BASARNAS	- ASEAN-United States
	- Badan Nasional Pencarian dan Pertolongan Republik Indonesia
BNPB	
BPBD	- Badan Nasional Penanggulangan Bencana
CCST	- Badan Penanggulangan Bencana Daerah
CDW	- Country Cluster Support Team
CERF	- Concept & SOP Development Workshop
CFE-DM	- Central Emergency Response Fund
CMCS	- Centre for Excellence in Disaster Management
COE	- Civil-Military Coordination Section
COVID-19	- Council of Europe
CTF	- Corona Virus Disease 2019
CTF 151	- Coalition Task Force
DART	- Combined Task Force 151
DHA	- Disaster Assistance and Rescue Team
DPKO	- Department of Humanitarian Affairs (now OCHA)
DRR	- Department of Peace Operations
DVI	- Disaster Risk Reduction
ECHO	- Disaster Victims Identification

EUMS	- European Community Humanitarian Office
ENSO	- European Union Military Staff
EPWG	- EL Nino-Southern Oscillation
EX COORES	- Emergency Preparedness Working Group
HADR	- Exercise Coordinated Response
HAZMAT	- Humanitarian Assistance and Disaster Relief
HI	- Hazardous Materials
ICDO	- Handicap International
ICRC	- International Civil Defence Organisation
ICVA	- International Committee of the Red Cross
IFRC	- International Council of Voluntary Agencies
	- International Federation of Red Cross and Red
INCBDM	Crescent Societies
	- Indonesia National Coordinating Body for
INSARAG	Disaster Management
IOD	- International Search and Rescue Advisory Group
IOM	- Indian Ocean Dipole
ISDR	- International Organisation for Migration
MCDA	- International Strategy for Disaster Reduction
MCRS	- Military-Civil Defence Asset
MDD	- Malaysia Centre for Remote Sensing
MNF	- Malaysia Department of Irrigation and Drainage
MoU	- Multinational Force
MPAT	- Memorandum of Understanding
NADMA	- Multinational Planning and Augmentation Team
NATO	- National Disaster Management Agency
NMTDP	- North Atlantic Treaty Organisation

NLTDP	- National Medium Term Development Plan
OCHA	- National Long Term Development Plan
	- Office for the Coordination of Humanitarian Affairs
PDC	
PHIVOLCS	- Pacific Disaster Centre
	- Philippine Institute for Volcanology and Seismology
POLRI	
PSI	- Police of Republic of Indonesia
RHCC	- Pollutants Standard Index
	- Regional Humanitarian Assistance and Disaster Relief Coordination Centre
RSIS	
RSN's	- Rajaratnam School of International Studies
SAF	- Republic Singapore Navy's
SCDF	- Singapore Armed forces
SCHR	- Singapore Civil Defence Forces
SCCCC	- Steering Committee for Humanitarian Response
SDMOF	- Singapore Changi Command and Control Centre
SEATO	- Senior Disaster Management Officials Forum
SFDRR	- Southeast Asia Treaty Organisation
SMART	- Sendai Framework for Disaster Risk Reduction
	- Special Malaysian Disaster Assistance and Rescue Team
SOP	
TCG	- Standing Operating Procedures
TE	- Tripartite Core Group
TFEP	- Tempest Express
UN	- Task Force for Emergency Preparedness
UN-CMCoord	- United Nations

UNDAC	- United Nations Civil-Military Coordination
UNDRR	- United Nations Disaster Assessment and Coordination
UNHCR	- United Nations Office for Disaster Risk Reduction
	- United Nations High Commissioner for Refugees
UNICEF	- United Nations International Children's Emergency Fund
UNIKOM	- United Nations Iraq Kuwait Observer Mission
UNPKO	- United Nations Peacekeeping Operations
UNTAC	- United Nations Transitional Authority in Cambodia
UNTAG	- United Nations Transition Assistance Group
USAR	- Urban Search and Rescue
USD	- United State Dollar
USCINCPAC	- United States Commander in Chief, Pacific Command
USINDOPACOM	- United States Indo-Pacific Command
WCDRR	- World Conference on Disaster Risk Reduction
WFP	- World Food Programme
WHO	- World Health Organisation

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CHAPTER 1

Introduction

This chapter will generally discuss on the background of Association of Southeast Asian Nations (ASEAN) especially Malaysia, Singapore, and Indonesia as a member's states, problem statement, research objectives, research questions, conceptual framework, significant of the research, scope and limitation of the research, definition of term and structure of the study.

1. Background of Association of Southeast Asian Nations (Malaysia, Singapore, and Indonesia)

Association of Southeast Asian Nations (ASEAN) was established on August 1967 with the signing of ASEAN Declaration in Bangkok, Thailand (Bangkok Declaration) between five countries namely Malaysia, Indonesia, Singapore, Philippines, and Thailand (ASEAN Secretariat, 2020).

Five Foreign Minister named as the founding father namely Tun Abdul Razak of Malaysia, Adam Malik of Indonesia, Sinnathamby Rajaratnam of Singapore, Thanat Khoman of Thailand, and Narciso Ramos of Philippines (**Figure 1**) sat down in the main hall of the Department of Foreign Affairs building in Bangkok on August 8th, 1967, signing a document of established of ASEAN.



Figure 1: The Founding Father of ASEAN

Thereafter, the ASEAN members turn big with the joining of Brunei Darussalam in 1984, followed by Vietnam in 1995, Lao People Democratic Republic and Myanmar in 1997 and lastly Cambodia in 1999 making up what is the ten members states of ASEAN (Flores. J.M, .M.C Abad,Jr. 1998).

The ASEAN earlier establishment organisation was Southeast Asia Treaty Organisation (SEATO) formed by the United States, France, Great Britain, New Zealand, Australia, and Pakistan in September 1954 and only joined by the two Southeast Asian country namely Philippines and Thailand (Office of Historian, Foreign Service Institute, 2016). The reason of this establishment is to combat communism from gaining ground in the region. The Philippines joining this organisation because of close tie with the United States whilst Thailand joined this organisation in concerning the potential of Chinese communist subversion on their land (Buszynski, L., 1981).

The reminder of the region such as Malaysia (including Singapore), Burma, and Indonesia preferred not to joint but maintaining their neutrality. The Indochina country

namely Vietnam, Cambodia and Laos were prevented by the French from joining any international military alliance (United States Department of State, 2016)

Furthermore, SEATO is not only for the Southeast Asia country but is also interested by country outside of this region such as United States where they viewed SEATO as essential frontier to its global cold war policy containment, France and Great Britain interested in developments due to it had long maintained colonies in the region, New Zealand and Australia interested in Asian affairs because of their geographical position in the Pacific, and lastly Pakistan sees potential for receiving support in its struggle against India (Office of Historian, Foreign Service Institute, 2016).

The significant of ASEAN establishment are due to the power vacuum after the withdrawal of the colonial powers which could attracted other country to step in for political gains (Foreign Minister of Thailand, 1992). Furthermore, the SEATO experienced resulting those neighbouring countries need to cooperate and share common interest. Moreover, there are needs of joint forces to strengthen and protect Southeast Asian countries against big power rivalry and finally to serve common interest and efforts (Office of Historian, Foreign Service Institute, 2016)..

Prior to ASEAN establishment, there are two organisations existed namely the mini organisation named as Association of Southeast Asia (ASA) and Asian and Pacific Council (ASPAC) was established in 1961 and 1966. The ASA comprising only with three members namely Philippines, Malaysia, and Thailand but the internal dispute between these three members caused the ASA collapse. In the other hand, in 1966, ASPCA established consist of larger group nations such as Japan, South Korea, Malaysia, Philippines, Australian, Taiwan, New Zealand, South Vietnam and Thailand but again was afflicted by international political dispute (Foreign Minister of Thailand, 1992)

The establishment of ASEAN are to accelerate the member states economic growth as a foundation for prosperous and peaceful of South East Asian Nations, to promote regional peace and stability among the South East Asian countries based on United Nations Charter, to promote active collaboration and mutual assistance amongst the member states on common interest such as economic, social, cultural, technical, scientific and administrative fields, to provide assistance in form of training and research facilities in education, professional, technical and administrative spheres and to collaborate on agriculture and industries, transportation and communication facilities and the raising of the standards of living (ASEAN Secretariat, 2024).

The ASEAN flag significantly indicates a unity amongst the Member States' and showing support for the principles and endeavours of ASEAN as to promote greater awareness and solidarity of ASEAN. The colours of the flag: blue represent as a stable and peaceful, red represent as courage and dynamism, white represent as purity and united, and lastly yellow symbolises as prosperity ASEAN.

Moreover, the colours of the ASEAN flag represent the main colour of the flag of all ASEAN Member States'. The stalk of padi in the centre of the emblem represent all countries in ASEAN bound together in friendship and solidarity whilst the white circle indicated as unity of ASEAN. ASEAN Flag as **Figure 2**.



Figure 2: ASEAN Flag

Significantly, Malaysia is a developing country with prefix data from first quarter of 2019 for Malaysia population is 32.66 million (Department of Statistics Malaysia, 2023) whilst Singapore, an island country and city state in maritime Southeast Asia census of population administrative report (2020) estimated that total populations as mid-year 2023 is 5,917,648 million. Indonesia in other hand, a country in between Indian and Pacific oceans populated with over 275.4 million people separated all over Indonesia land (BPS - Statistics Indonesia, 2023).

Malaysia is located close to the equatorial line and situated in the heart of Southeast Asia and has two main geographical parts, the peninsular Malaysia in the west which is bordering with Thailand to the north and Singapore to south. Whilst the second part is East Malaysia namely Sabah and Sarawak that occupied one third of the island of Borneo separated with the South China Sea water and bordered to Brunei in the north and Indonesia to the south. This country is also bordering to Java Island, Indonesia with Malacca Strait. Approximately, Malaysia total land area is 329,847 square kilometre (Government of Malaysia, 2023).

Singapore is about 734.3 square kilometres with nearly two thirds of the main island is less than 15 metres above sea level with the highest summit is the Timah Hill with approximately has 162 metres of elevation. Located at the southern tip of the Malaysia Peninsula and 137 kilometre north of the equator line. Singapore is separated with Johor Strait to the north and Singapore Strait to the south (Britannica, 2024).

Indonesia total area is approximately 1,892,410,09 square kilometres composed of 17,500 islands including the five main islands namely Sumatra, Java, Kalimantan (part of Borneo), Sulawesi and Irian Jaya (part of New Guinea). Astronomically, Indonesia is located at zero degree of latitude line of equator line. Indonesia boundaries lies between Malaysia, Singapore, Vietnam, Philippines, Thailand, Palau and South China Sea to the north, Australia, Timor Leste and Indian Ocean to the south, New Guinea, and Pacific Ocean to east and Indian Ocean to the west (BPS - Statistics Indonesia, 2023). The geographical location for Malaysia, Singapore, and Indonesia as shown in **Figure 3** below.



Figure 3: Location and Geography of Malaysia, Indonesia, and Singapore

2. Problem Statement

The United Nations humanitarian assistance and disaster relief activities encompasses various aspect with the aim in assisting affected communities, to save lives, alleviating suffering, and support countries, including providing humanitarian aid, emergency response, logistics, coordination, capacity building, risk reduction and long-term recovery and development efforts in building resilience to future disasters and crises.

According to United Nation Office for Disaster Risk Reduction (2023), disaster is defined as serious disruption of the community or society function at any scale caused by hazardous activities interacting with the conditions of exposure, vulnerability and capacity resulting human, material, economic and environmental losses, and impacts.

Moreover, International Federation of Red Cross and Red Crescent Societies (2023) defined disaster as a serious disruption that exceeding the community capacity to cope with its own resources. In addition, Oxford dictionary (2023) defined disaster as a sudden accident or a natural catastrophe that causes great damage or loss of life.

ASEAN basic understanding on disaster relief was only through biannual ASEAN Expert Group on Disaster Management (AEGDM) meetings that establish in 1971. Moreover, the signatory of a declaration on mutual assistance on natural disasters with intention to provide supplies to the impacted country between the ASEAN Member States has only been signed in 1976.

During the unexpected massive Indian Ocean tsunami tragedy in 2004, ASEAN did not have any mechanism or collective efforts in responding to the disaster that occurred.

ASEAN showed non commitment to the regional humanitarian assistance and disaster relief.

The response to Myanmar after cyclone NARGIS struck this country on May 2008 marked a significant first moment for ASEAN member states efforts to coordinate regional disaster response in sending relief assistance (Easton, RJ, 2015)

Thus, this study aim is to synthesise the ASEAN non-commitment efforts up to the first moment of ASEAN coordination to regional humanitarian assistance and disaster relief in Myanmar by determining the perspective from Malaysia, Singapore, and Indonesia point of view. This study is also due for the significant efforts of humanitarian assistance and disaster relief frequency focuses on Malaysia, Singapore, and Indonesia, and lastly, to offer suggestions in which enhancing information sharing, interoperability, trust and relationship between Malaysia, Singapore, Indonesia, and ASEAN.

3. Research Objectives

3.1 To determine the perspective of Humanitarian Assistance and Disaster Relief from Malaysia, Singapore, and Indonesia point of view.

3.2 To determine the significant efforts of Humanitarian Assistance and Disaster Relief frequency focuses on Malaysia, Singapore, and Indonesia.

3.3 To offer suggestions in which enhancing information sharing, interoperability, trust and relationship between Malaysia, Singapore, Indonesia and ASEAN.

4. Research Questions

As to achieve the research objective, this study attempts to answer the research question as below:

4.1 **Objective 1:** To determine the perspective of Humanitarian Assistance and Disaster Relief from Malaysia, Singapore, and Indonesia point of view.

- RQ1: What are the perspectives of Humanitarian Assistance and Disaster Relief frequency focuses on Malaysia, Singapore, and Indonesia?

4.2 **Objective 2:** To determine the significant efforts of Humanitarian Assistance and Disaster Relief frequency focuses on Malaysia, Singapore, and Indonesia.

- RQ2: Are there any significant efforts of Humanitarian Assistance and Disaster Relief frequency focuses on Malaysia, Singapore, and Indonesia.

4.3 **Objective 3:** To offer suggestions in which enhancing information sharing, interoperability, trust and relationship between Malaysia, Singapore, Indonesia, and ASEAN.

- RQ3: What are the best suggestions in which enhancing information sharing, interoperability, trust and relationship between Malaysia, Singapore, Indonesia, and ASEAN.

5. Conceptual Framework

The conceptual framework for this research as showed in **Figure 4**.

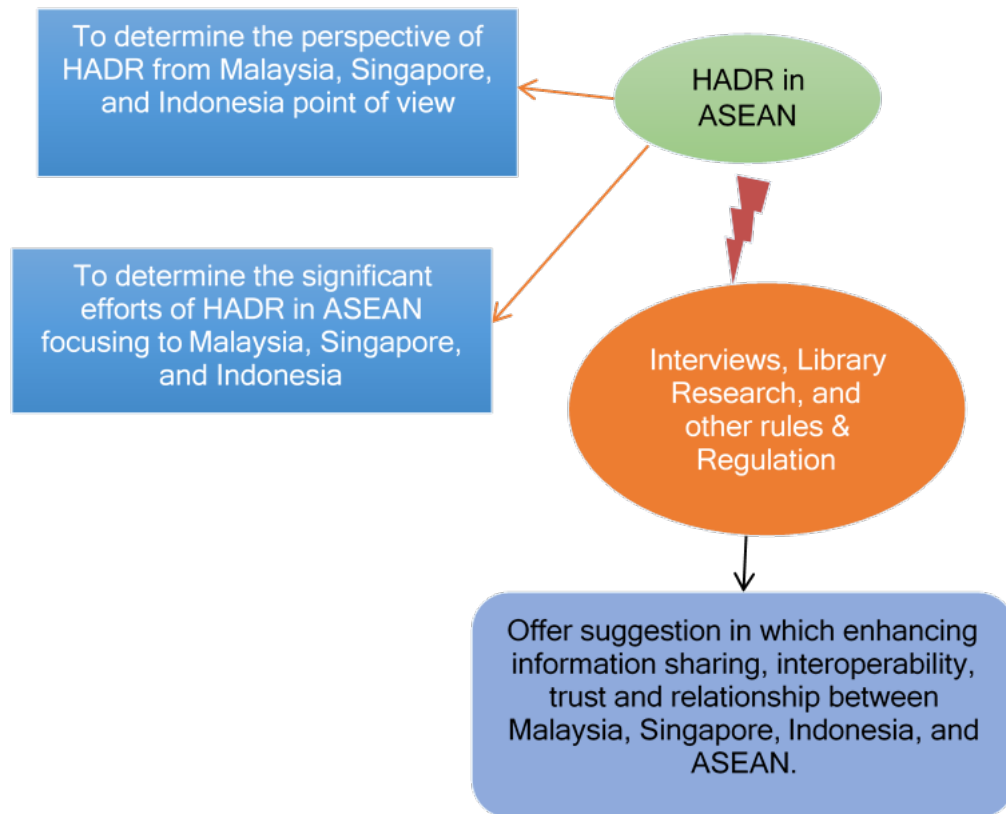


Figure 4: Conceptual Framework

6. Significant of Research

Since the humanitarian assistance and disaster relief activities are related to various aspect such as assisting affected communities, to save lives, alleviating suffering, and support countries, including providing humanitarian aid, emergency response, logistics, coordination, capacity building, risk reduction and long-term recovery and development efforts in building resilience to future disasters and crises. Thus, this study will provide the perspective of Humanitarian Assistance and Disaster Relief from Malaysia, Singapore,

and Indonesia point of view. Subsequently this study will provide the significant efforts of Humanitarian Assistance and Disaster Relief frequency focuses on Malaysia, Singapore, and Indonesia. And lastly, this study will provide suggestions in which enhancing information sharing, interoperability, trust and relationship between Malaysia, Singapore, Indonesia, and ASEAN.

7. Scope and Limitations of the Research

In this paper, researcher wanted to study the perspective of Humanitarian Assistance and Disaster Relief from Malaysia, Singapore, and Indonesia point of view. Furthermore, the researcher wanted to understand the significant efforts of Humanitarian Assistance and Disaster Relief frequency focuses on Malaysia, Singapore, and Indonesia. Finally, to offer suggestions in which enhancing information sharing, interoperability, trust and relationship between Malaysia, Singapore, Indonesia, and ASEAN.

The data for this paper was collated through the secondary data in form of interviewing subject matter experts, necessary documents, acts, regulation, and policies focusing on the humanitarian assistance and disaster relief, services magazines, journal, article, National Disaster Management Agency sources, and news. Published materials such as relevant research reports, articles, books, annual reports have been reviewed to support the secondary data.

This research contains classified information; therefore, it will not be released to other party without the consent of the College.

The information given in this paper is only for academic purposes and not to be communicated directly or indirectly to the press or any person not authorised to receive it unless been approved by the College.

8. Definition of Term

8.1 Asian and Pacific Council (ASPAC)

ASPAC was established in 1966 and consist of Japan, South Korea, Malaysia, Philippines, Australian, Taiwan, New Zealand, South Vietnam, and Thailand. ASPAC collapse due to afflicted by international political dispute especially with China.

8.2 Asia-Pacific Economic Cooperation (APEC) Disaster Risk Reduction (DRR) Framework

APEC-DRR Framework served as a driving force of APEC's in building the disaster resilient efforts to address the complexity and frequency of natural disasters impacting economic growth in the region.

8.3 Association of Southeast Asia (ASA)

ASA was established in 1961 and set as foundation to ASEAN establishment. ASA collapse due to internal disputes between the three Member States namely Philippines, Malaysia, and Thailand.

8.4 Central Emergency Response Fund (CERF)

CERF is a United Nations fund providing quick responses in funding to affected countries for life saving and humanitarian action in emergencies disaster and crises.

8.5 Emergency Preparedness Working Group (EPWG)

An APEC Task Force for Emergency Preparedness (TFEP) with main efforts to enhance human security and reducing the threat of disruptions to business and trade in the Asia-Pacific Region.

8.6 International Strategy for Disaster Reduction (ISDR)

ISDR is a United Nations framework promoting a culture of disaster risk reduction to reduce vulnerability to hazards and increase community resilience.

8.7 International Search and Rescue Advisory Group (INSARAG).

INSARAG is an establishment of United Nations and a network of countries and organisations to enhance international urban search and rescue efforts in response to earthquakes and other disasters.

8.8 Military and Civil Defence Asset (MCDA) Guidelines.

A guideline in the use of international military and civil defence personnel, equipment, supplies, and services in support to the United Nations in pursuit of humanitarian objectives in complex emergencies. The following States and Organisation were involved in a Drafting Committee namely Austria, Czech Republic, France, Germany, Italy, Sudan, Switzerland, United Kingdom, United States of America, DPKO, SCHR, UNHCR, UNICEF and WFP. Whilst the Review Committee consist of representatives from Australia, Canada, China, Costa Rica, Denmark, Egypt, Estonia, Finland, Ghana, Greece, India, Japan, Libyan Arab Jamahiriya, Madagascar, Mauritius, Mexico, Netherlands, Norway, Poland, Russian Federation, Sweden, Turkey, Yugoslavia, COE, ECHO, EUMS, ICDO, ICRC, ICVA, IOM, NATO, OCHA, and WHO.

8.9 Non-State Actors

According to Goldstein, et, al., (2014), non-governmental actors participating in IR alongside states. They are strongly influencing the state actors but are not allied to any state government. These actors if operating across the international borders will be called transnational actors. An example of non-states actors are intergovernmental organizations (such as United Nations, NATO, Arab League), Non-governmental organizations (such as Amnesty International, Lions Clubs, Red Cross), and Multinational Corporations (such as ExxonMobil, Toyota, Tesco).

8.10 Oslo Guidelines

Oslo Guidelines is a guideline in the use of Military and Civil Defence asset in disaster relief efforts. Started in Oslo, Norway in 1992 and was released in 1994. The following States and Organisation were involved in this effort namely Argentina, Austria, Belgium, Germany, Indonesia, Italy, Japan, Kenya, Netherlands, Norway, Russian Federation, Switzerland, United Kingdom of Great Britain and Northern Ireland, United

States of America, AFDRU, Brown University's Watson Institute, DHA, European Union, ECHO, ICDO, ICRC, IFRC, INSARAG, NATO, Steering Committee for Humanitarian Response, UNHCR, UN Legal Liaison Office, University of Naples, University of Ruhr, WHO and Western European Union.

8.11 Sendai Framework for Disaster Risk Reduction (SFDRR)

SFDRR is an agreement endorsed by the UN General Assembly during the 2015 Third UN World Conference on Disaster Risk reduction (WCDRR) by recognising that the Member States has the primary role to reduce disaster risk but that the responsibility should be shared with other stakeholders (including local government, the private sector, and other stakeholders).

8.12 Southeast Asia Treaty Organisation (SEATO)

SEATO was formed by the United States, France, Great Britain, New Zealand, Australia, and Pakistan in September 1954 as to combat communism from gaining ground in the Southeast Asia region. There are joined by only two Southeast Asian country namely Philippines and Thailand. The Philippines joining this organisation because of close tie with the United States whilst Thailand joined this organisation in concerning the potential of Chinese communist subversion on their land.

8.13 State Actors

As defined in International Relations book (Goldstein, Pevehouse, 2014), state actors are state governments exercising sovereignty over their territory. It is recognized

as sovereign by other states and inhabited by a population to form a civil society and seat of government is headed with a leader as a head of government or head of state.

8.14 Task Force for Emergency Preparedness (TFEP)

Mandated by APEC Senior Officials to facilitate emergency and disaster preparedness within APEC via electronic communications.

8.15 The Office for the Coordination of Humanitarian Affairs (OCHA)

OCHA act as a focal point for United Nations in coordinating humanitarian responses. OCHA works to mobilise and coordinate humanitarian assistance, advocacy, and policy guidance to support affected populations.

8.16 The United Nations Disaster Assessment and Coordination (UNDAC)

UNDAC is a rapid response emergency team that assisting affected countries and humanitarian partners in assessing and coordinating international response during the initial phase of disaster.

8.17 Thematic Cluster

The thematic clusters are a specific type of emergencies (health, shelter, food security and others), United Nations and its partners organise thematic clusters to coordinate the delivery of aid and resources in a more efficient and coherent manner.

8.18 Tripartite Core Group

An establishment by ASEAN act as coordinating centre for aid, improving access for humanitarian organisations to affected area, and carrying out the ensuing recovery efforts after the Cyclone Nargis struck Myanmar in 2008.

8.19 United Nations Peacekeeping Operations (UNPKO)

UNPKO is a role of UN members in a way to help conflicted countries to set a condition for lasting peace by either peace building, peace-making or peace enforcement.

8.20 United Nations Office for Disaster Risk Reduction (UNDRR)

UNDRR is an entity that provide leadership and support to helps decision makers across the globe in disaster risk reduction to achieve inclusive sustainable development and the goal of the Sendai Framework.

9. Structure of the Study

This paper is intended to determine the perspective of Humanitarian Assistance and Disaster Relief from Malaysia, Singapore, and Indonesia point of view, the significant efforts of Humanitarian Assistance and Disaster Relief frequency focuses on Malaysia, Singapore, and Indonesia, and lastly, to offer suggestions in which enhancing information sharing, interoperability, trust and relationship between Malaysia, Singapore, Indonesia, and ASEAN. In doing so, therefore this paper will be designed and divided into five chapters as follows:

9.1 Chapter 1 - Introduction

This chapter will discuss about the background of Association of Southeast Asian Nations especially Malaysia, Singapore, and Indonesia as a member's states, problem statement, research objectives, research questions, conceptual framework, significant of the research, scope and limitation of the research, definition of term and structure of the study.

9.2 Chapter 2 - Literature Review

This chapter will discuss as much information on natural disasters with respect to Association of Southeast Asian Nations especially Malaysia, Singapore, and Indonesia as a member's states from previous study and from other researcher views.

9.3 Chapter 3 - Research Methodology

This chapter will discuss about research methodology consisting of research setting, research design, selection of the subject, research instrumentation, and data collection procedure.

9.4 Chapter 4 - Discussion

This chapter will discuss on data analysis as collected via method described in Chapter 3. The findings were presented comprehensively either in tabulated table form, figure, or written description.

9.5 Chapter 5 - Conclusion and recommendations

This chapter will discuss on the summary of the entire chapters which including the conclusion and recommendations on the suggestions in which enhancing information sharing, interoperability, trust and relationship between Malaysia, Singapore, Indonesia, and ASEAN, suggestion for future research study and limitations of the study.

CHAPTER 4

Discussion

This chapter will discuss the perspective of Humanitarian Assistance and Disaster Relief from Malaysia, Singapore, and Indonesia point of view and the significant efforts of Humanitarian Assistance and Disaster Relief frequency in these three countries by using methodology described in chapter three of this research paper.

4.1 Introduction

As discussed in chapter three of this research paper, the detailed research findings were presented either in the form of tabulated table or written description. The purposes of the study were to determine the perspective of Humanitarian Assistance and Disaster Relief from Malaysia, Singapore, and Indonesia point of view, the significant efforts of Humanitarian Assistance and Disaster Relief frequency focuses on Malaysia, Singapore, and Indonesia,

4.2 Objective 1 - Perspective of Humanitarian Assistance and Disaster Relief from Malaysia, Singapore, and Indonesia Point of View

As previously discussed, ASEAN region prone to various natural disaster due to the geographical location. According to ASEAN Magazine (2023), there are 42 disasters responses were recorded (either for preparedness & assessment mission or emergency response mission) in the ASEAN region for the period of November 2012 until August 2023. For instance, typhoons frequently hit countries like Philippines and Vietnam in which causing damages and loss of life. While countries like Indonesia, Thailand and again Philippines are most likely to have earthquakes. And a country like Malaysia is very

seldom to have typhoons or earthquakes but prone to the effects of the seismic impact and the increasement of rainfall intensity that can contribute to flood.

In the early establishment, ASEAN did not have any commitment to the regional humanitarian assistance and disaster relief. ASEAN basic understanding on disaster relief was only through biannual ASEAN Expert Group on Disaster Management (AEGDM) meetings that established in 1971. Moreover, the signatory of a declaration on mutual assistance on natural disasters with intention to provide supplies to the impacted country between the ASEAN Member States has only been signed in 1976.

The non-interference policy in the internal affairs of one another is meant to guide ASEAN's behaviour in domestic matters of neighbouring states (Molthof, M., 2012). Furthermore, a mutual respect for the independence, sovereignty, equality, integrity, and national identity is a fundamental principle to strengthen the foundation for a prosperous and peaceful community of Southeast Asian Nations.

After the massive Indian Ocean tsunami tragedy in 2004, ASEAN adopted a declaration of action to strengthen Emergency, Rehabilitation, Reconstruction and Prevention through Special ASEAN Leaders' meeting on December 26, 2004 (ASEAN Secretariat, 2012). The utilisation of military and civilian personnel in disaster relief and the establishment of a centre to coordinate regional disaster response is one of the proposals in the agreement.

The ASEAN responses after the Cyclone Nargis struck Myanmar in 2008, marked an early moment of regional disaster response to ASEAN member states (Easton, RJ, 2015). The establishment of Tripartite Core Group (TCG) act as coordinating centre for aid, improving access for humanitarian organisations to affected area, and carrying out the ensuing recovery efforts (State Control and Civil Society in Burma, 2010). The

deployment of ASEAN Emergency Rapid Assessment Team and the activation of AHA Centre to Myanmar as to provide technical assistance, assessment to determine the needs on the ground and facilitating the regional assistance in coordinating the aid efforts (financial, food, medical supplies, and relief supply).

Moreover, the ASEAN Agreement on Disaster Management and Emergency Response as the main common platform in disaster management and emergency response in the region is the highest achievement in the ASEAN Charter (ASEAN Secretariat, 2016). As such, the disaster management and emergency responses are not limited to cooperation, coordination, technical assistance, and resources but provide regional mechanism to reduce disaster losses and jointly respond to disaster emergencies.

Having said that, ASEAN Member States through ASEAN Committee on Disaster Management committed to institutionalise the disaster management and climate change adaptations at all levels of local, national, and regional government. Moreover, the establishment of AHA Centre as the ASEAN Agreement on Disaster Management and Emergency Response working agent increased the ASEAN advancement in disaster management.

During APEC-DRR 15th Senior Disaster Management Officials' Forum in Thailand on August 2022, one of the key points is whether to update the Asia-Pacific Economic Cooperation (APEC) Disaster Risk Reduction (DRR) Framework action plan due to the impact of disaster requires more proactive, more resilience, multi-stakeholders, multi strategic interventions. The Emergency Preparedness Working Group (EPWG) in which to operationalise the APEC-DRR Framework plays a constructive role in the region as to assisting and helping reducing risk of disaster and building business and community resilience (SDMOF, 2022).

Prior to that, APEC's Task Force for Emergency Preparedness (TFEP) was established during the 2005 APEC Senior Officials in Korea and mandated to facilitate emergency and disaster preparedness within APEC via electronic communications. In 2008, APEC Senior Officials extended this task force mandate until end of 2009 and in 2010, APEC's recognising the importance of Task Force for Emergency Preparedness work, therefore elevated this task force into permanent Emergency Preparedness Working Group (APEC-EPWG, 2019).

In respecting and recognising the Sendai Framework for Disaster Risk Reduction 2015-2030 plan, therefore, the APEC-DRR Framework has been develop based on current APEC work and other relevant international arrangements composed of four pillars namely Prevention and Mitigation, Preparedness, Response, and lastly Rehabilitation and Build Back Better (SDMOF, 2022).

The initiatives made through APEC-DRR Framework anchored on community participation, disaster risk governance, disaster risk financing, innovations on science and technology and many more initiatives in which complements and strengthens the resilient framework of ASEAN.

Currently, Military involvement in humanitarian assistance and disaster relief shaping their relational structure and their influence on the humanitarian and disaster context due to their unique capability (Trias, A, Cook, A., 2023). The establishment of Oslo Guidelines in the beginning of 1992 giving a guideline the use of Military and Civil Defence asset in disaster relief efforts. This guideline was then released in 1994 with the efforts of 16 Country and 16 Organisations.

Furthermore, there is also a guideline on the use of Military and Civilian Defence Asset to support United Nations humanitarian activities in complex emergencies called Military Civil Defence Asset (MCDA) Guidelines providing guidance when these resources can be used, how they should be employed, and how United Nations agencies should interface, organise and coordinate with International Military Forces with regards to the use of military and civil defence assets. According to Federal Foreign Office of Germany (2007), the Military and Civil Defence asset comprises of relief personnel, equipment, supplies, and services provided by foreign military and civil defence organisation for humanitarian assistance.

The Fifth Asia Pacific Conference on Military Assistance to Disaster Relief Operations (APC-MADRO) in 2010 held in Thailand providing an Asia-Pacific Regional guidelines for the use of foreign military assets during natural disaster response operations. This concept was grew out during the International Seminar held in New Delhi in 2005 in the wake of 2004 Indian Ocean tsunami considering challenges for Armed Forces specifically in disaster relief operations. The first APC-MADRO were held in 2006 at Singapore co-hosted by Singapore Defence Force and UN OCHA, had outlining the modus operandi, endorsement of aims and goals for the APC-MADRO for better guidance for military commanders and staff that might involve in disaster relief operations.

In addition, the establishment of Multinational Planning and Augmentation Team (MPAT) in 2000 act as an effort of United States Commander in Chief, Pacific Command (USCINCPAC) under the establishment of United States Indo-Pacific Command (USINDOPACOM) to increase Multinational Force (MNF) and Coalition Task Force (CTF) operational level staff capability especially in planning expertise. Basic principles of this multinational unity of effort are common understanding, coordinated policy and plans and lastly trust and confidence. The levels of this SOP translate strategic objectives into tactical tasks via strategies, campaigns, and major operations.

Currently, Multinational Force Standing Operating Procedures (MNF SOP) was successfully developed in helping to increase the speed of responses, interoperability, mission effectiveness, and unity of effort during crisis action situations. The goal is to build a cadre of staff officers from throughout the region to develop common staff planning procedures and planning experts via staff planning workshop (Tempest Express (TE)) and Concept & SOP Development Workshop (CDW).

Moreover, an effective dialogue between humanitarian organisations, State security forces and non-state armed groups is critical as to obtain and maintain humanitarian access. This interaction ranges from coexistence up to cooperation. The UN Civil-Military Coordination (UN-CMCoord) promoting civilian and military to interact during humanitarian emergencies and to achieve common goals, avoiding competition, and to minimise inconsistency. Overall efforts are to support humanitarian operations with a military presence. The Civil-Military Coordination Section (CMCS) is the focal point in the UN system for humanitarian civil-military coordination.

4.3 Objective 2 - The Significant Efforts of Humanitarian Assistance and Disaster Relief Frequency in Malaysia, Singapore, and Indonesia

4.3.1 Malaysia Efforts in Humanitarian Assistance and Disaster Relief.

Significantly, the disaster management efforts in Malaysia are still new and was introduced after the collapse of Condominium in Hulu Kelang on 11th December 1993. Prior to that incident, there is no proper disaster management and relief policy or agencies or organisation to address, facilitating and managing the disaster/crisis. Thus, the Cabinet meeting in May 1994 agreed to form a mechanism in which will be functioning

under the Disaster Management Division of the National Security Council to mitigate and administer action to be taken in any disaster occurs.

A policy of national disaster management called as Directive 20, Policy and Mechanism of National Disaster Management and Relief were formulated as to integrate, coordinate and managing the disaster happen in the country. The main objective of this policy is to draw a land disaster management and relief policy based on level of disaster and to establish a management mechanism in which decides the role and responsibility of agencies involved in action against a disaster (National Security Council, 1997).

After two years of the Hulu Kelang tragedy, a disaster rescue team equipped with specialised skills and equipment to respond to any search and rescue operation in any major disaster called Special Malaysian Disaster Assistance and Rescue Team (SMART) was established in August 1995 under the National Security Council Directive Number 19 (the institution of Special Malaysia Search and Rescue Team).

This disaster relief and rescue task force was classified as Heavy Urban Search and Rescue Team (USAR) by the United Nations International Search and Rescue Advisory Group and has extensively work domestically and internationally together with the most prominent non-government organisation (NGO) MERCY Malaysia and with the International Federation of Red Cross and Red Crescent Societies (IFRC) and United Nation (UN) around the world.

Post Indian Ocean tsunami in 2004, Malaysia involved in relief work and humanitarian aid by sending Armed Forces in setting up emergency medical relief, reconstruction and rehabilitation, prevention, and mitigation. The Malaysian Police as to assist on safety and security and Non-Governmental Organisation (NGOs) bodies as to assist on psychosocial intervention, and capacity building especially at Aceh province.

Furthermore, after Malaysia faced a worst monsoon flood causing extensive damage and losses in December 2014 impacted several states especially Kelantan, the National Disaster Management Agency (NADMA) was established after considering the memorandum of the Prime Minister in August 2015 and marks the expansion of Federal government structures to proactively facilitating and managing the disaster risk and response (Centre for Excellence in Disaster Management & Humanitarian Assistance, 2022).

NADMA roles as national focal point for disaster management and responsible to formulate national disaster management policy, regulate the implementation of the policies, coordinate disaster risk reduction initiative, cohere disaster relief exercises, implement public awareness programme, managing disaster relief trust fund, act as secretariat of National Disaster Management Committee, act as head of humanitarian assistance disaster relief delegation, custodian for SMART Team and responsible for their deployment.

Some of the ways that Malaysia government looked into it namely, supporting the AHA Centre in which serves as a coordinating body for regional disaster response. It collaborates with other ASEAN countries through this centre to provide timely and effective assistance during disaster. The Malaysian Armed Forces through service branches namely the Army, the Royal Malaysian Navy and the Malaysian Air Force were standing nationwide to tackle any eventuality. On the other hand, the Ministry of Defence has also arranged a Forward Medical Team as to assist the Malaysian Health Ministry with check-ups for the affected populations.

Moreover, participation of Malaysia in joint exercise and training with regards to humanitarian assistance and disaster relief organised by ASEAN with the aim to enhance

the readiness and interoperability of regional disaster response teams, including military, civil defence, and humanitarian organisations.

In advance, Malaysia shares its expertise, experiences, and best practices in disaster management with other ASEAN member states including sharing information on disaster preparedness, early warning systems and innovative approaches to humanitarian assistance and disaster relief.

Malaysia too, contributes financially and provides material support to ASEAN's disaster response efforts including financial assistance, relief supplies and deploying personnel to affected area within the region. The bilateral engagement and agreements between Malaysia and individual member states enhanced the disaster response and relief initiative. This partnership involves in sharing resources, expertise, and mutual assistance during the emergencies.

The recognition of the important of regional cooperation and collective action in addressing the challenges posed by this disaster has help Malaysia to contribute its resources and expertise while benefiting from the support and cooperation of neighbouring countries in times of crises.

As for now, the Malaysia disaster management agencies has made progressively its early warning system for flood, earthquake, landslide, and tsunami as to name a few such as Malaysia Meteorological Department conducting tsunami alert warning system including sirens, fixed-line alert system, short messaging system, and weather forecasting.

The Malaysia Department of Irrigation and Drainage (MDD) conducting telemetry system for flood forecasting models and flood info. The Malaysian Centre for Remote

Sensing (MCRS) conducting disaster management applications system and Department of Environment conducting the air pollutant index (API) for haze.

Under the Malaysia disaster management structure, there are seven service themes were established namely search and rescue, health and medical services, media, support, security control, welfare and warning and alerts (Chong N.O & Kamarudin, KH, 2018).

4.3.2 Singapore Efforts in Humanitarian Assistance and Disaster Relief.

As discuss previously, there is small historical data on Singapore large scale incidents caused by any form of disaster. However, as parts of its development, Singapore has steadily built-up mitigation mechanism and adaptive framework and policies in addressing to emergencies of all type (CFE-DM, 2021). Moreover, the Ministry of Home Affairs is the lead agency together with Singapore Civil Defence Force (SCDF) as the main incident manager (CFE-DM, 2021).

During the ASEAN-US Defence Ministers' Informal meeting in Hawaii in April 2014, with the consent from other ASEAN Defence Minister, Singapore established a military-to-military coordination and response to disaster relief called Regional Humanitarian Assistance and Disaster Relief Coordination Centre (RHCC) on September of the same year (Changi RHCC, 2024). The RHCC role is to facilitate and supporting the military of the disaster affected state in coordinating assistance provided by foreign militaries. This RHCC operated at Singapore's Changi Command and Control Centre is a regional force multiplier with HADR agencies in the region or beyond in strengthening responses and networking during disaster (Pacific Disaster Centre, 2023).

The partnering between Singapore's Changi Regional Humanitarian Assistance and Disaster Relief Coordination Centre with Pacific Disaster Centre (PDC) taken places since 2018 looking into advance early warning, risk understanding and capacity developments with partners. Furthermore, the extension of the Memorandum of Understanding (MoU) in 2023 enhanced information sharing, building up capacity for disaster relief, continuity of joint training and exercises, increasing the interoperability of multi-hazard early warning between stakeholder and networking.

Moreover, S. Rajaratnam School of International Studies (RSIS) established the Humanitarian Assistance and Disaster Relief programme in July 2015 as to facilitate and enhance cooperation on preparedness and response strategies. This programme consists of regional emergency response frameworks, governance issues, disaster preparedness strategies and development of response for civilian and military actors (RSIS, 2023).

Singapore disaster response strategy is built upon a multi-tiered frameworks involving government agencies, non-governmental organisations, and community. The Singapore Civil Defence Force (SCDF) act as coordinator for emergency and contingency plans covering fires in high rise commercial and residential buildings, fires in Petro-chemical installations and oil refineries, release and spread of hazardous and toxic materials, collapse of buildings and other major structures and accidents involving land, air, sea, and rail transport.

Furthermore, Singapore through their Armed Forces (SAF) created various humanitarian assistance and disaster relief linkages in sense of partnership, agreements, and membership with stakeholders in disaster response operations and capacity building especially through simulation exercises, emergency logistics system capability, emergency responses operations workplans, joint disaster response plan and many others (CFE-DM, 2021).

As to mentioned a few, Singapore's Changi Regional Humanitarian Assistance and Disaster Relief Coordination Centre involves in a series of Exercise Coordinated Response (Ex COORES) cooperating with United States Indo Pacific Command and regional allies especially with other militaries and international groups such as OCHA, ICRC movement, and WHO. Additionally, Pacific Disaster Centre remain committed to building regional and partner capacity to prepare for, respond to, and recover from disasters in one of the highest and most hazard-prone regions of the world (Fredie, T. 2023)

Over the years, Singapore contributed to various regional and international humanitarian assistance and disaster relief efforts such as deployments to east Pakistan (currently Bangladesh) providing humanitarian assistance when the country hit by deadly cyclone in 1970, deployment within the United Nations flags UN Transition Assistance Group (UNTAG) during Namibia elections process in 1989, monitoring the demilitarised zone along Iraq-Kuwait border under UN Iraq Kuwait Observer Mission (UNIKOM) in 1991, assisting Cambodia over electoral process in Cambodia under UN Transitional Authority in Cambodia (UNTAC) in 1993, restoring peace and security to Timor-Lester under UN peacekeeping mission in Timor-Leste between 1999 and 2012, providing Singapore Armed Forces personnel participating in the multinational effort in reconstruction of Iraq, providing assistant in term of personnel and assets during the aftermath Indian Ocean tsunami in 2004 especially in Indonesia dan Thailand.

Singapore too has contributed to maritime security especially in Strait of Malacca initiatives such as establishment of Republic of Singapore Navy's (RSN's) Information Fusion Centre and patrolling along the Malacca Strait and to the Gulf of Aden by participating in multinational Combined Task Force (CTF) 151.

As discussed earlier, The Singapore Civil Defence Force is the focal point for the ASEAN Committee on Disaster Management. The Singapore Civil Defence Force was the first organisation in Asia Pacific Region classified as heavy urban search and rescue team by International Search and Rescue Advisory Group (INSARAG) in 2008 (UR, 2024).

The Singapore Civil Defence Force recruits and trains its operational staff to be specialists thus continue in its pursuit to be excellence, professional and quality service in carrying out its mission to protect and save lives and property.

The spectrum associating Singapore Civil Defence Force including of Fire and Rescue Specialist, Disaster Assistance and Rescue Team (DART) Specialist, Hazardous Materials (HAZMAT) Specialist and Paramedic Specialist.

4.3.3 Indonesia Efforts in Humanitarian Assistance and Disaster Relief

As an archipelagic nation located in the seismically active Pacific Ring of Fires, Indonesia faced a high risk of natural disasters such as earthquakes, tsunamis, volcanic eruptions, and floods. Indonesia commitment on humanitarian assistance and disaster relief capabilities led the development of innovative approaches such as investment for latest technology and infrastructure to disaster risk reduction, early warning systems, community resilience building and post disaster recovery and reconstruction efforts.

Moreover, Indonesia actively participating in regional and international collaborations on disaster response and relief efforts such as with ASEAN Agreement on Disaster Management and Emergency Response and ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management to enhance its capabilities, including the establishment of early warning system and disaster response centres in safeguarding

lives, livelihoods, and infrastructure after the massive 2004 Indian Ocean tsunami (CFE-DM, 2021)

Furthermore, the total defence system of Indonesia integrated the national led disaster managements not only the government but are also involving the whole society including the army, private sector, and civil society. The enactment number 24 of 2007 Law of the Republic of Indonesia concerning Disaster Management had help Indonesia to be more structured, and systematic in dealing with disaster (Samudro, Eko & Widana, I & Subiyanto, Adi & Mayori, Ersha, 2022).

Nonetheless, according to Law No 34/2004, the Indonesia Armed Forces will be the first responders during the disaster together with Indonesia National Disaster Management Agency in coordinating the search and rescue assistance, displacement of person, delivery of relief aid and other relevant activities.

The massive earthquakes off the northern Sumatran coast in 2004 and Palu in 2018 that caused tsunamis, witnessing Indonesia authorities namely the National Agency for Disaster Management (BNPB), Regional Disaster Management Agency (BPBD), and the Indonesian military scrambled to provide relief and aid to those affected.

Having said that, as mentioned by Ennio V.P (2017), other governmental and non-governmental agencies involve included Indonesian Police (POLRI), National Search and Rescue Agency (BASARNAS), Disaster Victims Identification Team (DVI), Handicap International (HI) and IFRC Country Cluster Support Team (CCST).

In addition, India launched an Operation Samudra Maitri (Oceanic Friendship) in providing humanitarian assistance and disaster relief as to ease the Indonesia government and authorities during both massive earthquakes in 2004 and 2018 that triggered tsunami

since Indonesia and India bind with maritime geography especially the eastern India Ocean.

Furthermore, during a visit by Indian Prime Minister to Indonesia in 2018, a memorandum of understanding called Shared Vision of Maritime Cooperation in the Indo-Pacific between Indonesia and India were signed as a blueprint for maritime partnership focusing Andaman Sea and Nicobar Command (ANC) in India and the port of Sabang in Indonesia (Raja C.M and Ankush A.W, 2018).

As mentioned in CFE-DM (2021), Indonesian government announced an initiative incorporating development agenda and the climate change such as adapting farming to climate change, optimal use of land, water and natural resources, conserving rainwater, early warning system for extreme weather events, protecting coastal zone, better urban planning and making infrastructure more resilient.

For this reason, Indonesia launched a National Long-Term Development Plan (NLTDP) 2005-2025 in continuation and renewal of National Medium Term Development Plan (NMTDP) 2005-2009, 2010-2014, and 2015-2019 with the aim to establish a nation that is developed and self-reliant, just and democratic and peaceful and united (Indonesia Investment, 2011).

4.4. Conclusion

In summary, this chapter is intended to determine the perspective of Humanitarian Assistance and Disaster Relief from Malaysia, Singapore and Indonesia point of view and the significant efforts of Humanitarian Assistance and Disaster Relief frequency focuses on Malaysia, Singapore, and Indonesia.

Humanitarian assistance and disaster relief activities included various aspect such as assisting affected communities, to save lives, alleviating suffering, and support countries, including providing humanitarian aid, emergency response, logistics, coordination, capacity building, risk reduction and long-term recovery and development efforts in building resilience to future disasters and crises.

In the early establishment, ASEAN basic understanding on disaster relief was only through biannual ASEAN Expert Group on Disaster Management (AEGDM) meetings that conducted in 1971.

Furthermore, the non-interference policy in the internal affairs of one another and a mutual respect for the independence, sovereignty, equality, integrity, and national identity are fundamental principle to strengthen the foundation for a prosperous and peaceful community of Southeast Asian Nations.

During the unexpected massive Indian Ocean tsunami tragedy in 2004, ASEAN did not have any mechanism or collective efforts in responding to the disaster that occurred. Thus, showed non commitment to the regional humanitarian assistance and disaster relief.

Through Special ASEAN Leaders' meeting on December 26, 2004, ASEAN adopted a declaration of action to strengthen emergency, rehabilitation, reconstruction, and prevention with the utilisation of military and civilian personnel in disaster relief and the establishment of a centre to coordinate regional disaster response.

After the cyclone NARGIS struck Myanmar on May 2008, ASEAN responded by coordinating regional disaster response in sending relief assistance. Moreover, the establishment of Tripartite Core Group act as coordinating centre for aid, improving

access for humanitarian organisations to affected area, and carrying out the ensuing recovery efforts.

The deployment of ASEAN Emergency Rapid Assessment Team and the activation of AHA Centre to Myanmar as to provide technical assistance, assessment to determine the needs on the ground and facilitating the regional assistance in coordinating the aid efforts such as financial, food, medical supplies, and relief supply.

Each of the said country showed significant efforts in humanitarian assistance and disaster relief such as Malaysia forming a mechanism and formulated policy in which will be functioning under the Disaster Management Division of the National Security Council to mitigate and administer action to be taken in any disaster occurs.

Furthermore, Malaysia established a disaster rescue team called Special Malaysian Disaster Assistance and Rescue Team (SMART) as to respond to any search and rescue operation in any major disaster. Malaysia too, involved in relief work and humanitarian aid by sending Armed Forces in setting up emergency medical relief, reconstruction and rehabilitation, prevention, and mitigation after the Indian Ocean tsunami struck Aceh province in 2004.

The establishment of National Disaster Management Agency (NADMA) in August 2015, marks the expansion of Federal government structures to proactively facilitating and managing the disaster risk and response.

The involvement of Malaysia in joint exercise and training with regards to humanitarian assistance and disaster relief organised by ASEAN enhance the readiness and interoperability of regional disaster response, including military, civil defence, and humanitarian organisations.

In advance, Malaysia shares its expertise, experiences, and best practices in disaster management with other ASEAN member states including sharing information on disaster preparedness, early warning systems and innovative approaches to humanitarian assistance and disaster relief.

Whilst Singapore, despite has not experienced to any natural disaster, the challenges however are for the emergency services in preventing and mitigating potential risk such as haze, flood, and occasional incidents. Singapore has steadily built-up mitigation mechanism and adaptive framework and policies in addressing to all type of emergencies. With the consent from other ASEAN Defence Minister, Singapore established a military-to-military coordination and response to disaster relief called Regional Humanitarian Assistance and Disaster Relief Coordination Centre (RHCC) as to facilitate and supporting the military of the disaster affected state in coordinating assistance provided by foreign militaries.

Moreover, the establishment of humanitarian assistance and disaster relief programme by S. Rajaratnam School of International Studies (RSIS) in July 2015, facilitate and enhance cooperation on preparedness and response strategies for civilian and military actors.

Singapore too has contributed to maritime security especially in Strait of Malacca initiatives such as establishment of Republic of Singapore Navy's Information Fusion Centre and patrolling along the Malacca Strait and to the Gulf of Aden by participating in multinational Combined Task Force 151.

Furthermore, Singapore involves in a series of Exercise Coordinated Response (Ex COORES) cooperating with United States Indo Pacific Command and regional allies especially with other militaries and international groups such as OCHA, ICRC movement, and WHO.

In addition, Singapore contributed to various regional and international humanitarian assistance and disaster relief efforts in many countries such as Pakistan, Namibia, Iraq-Kuwait demilitarise zone, Cambodia, and Timor-Leste.

For Indonesia, they actively participating in regional and international collaborations on disaster response and relief efforts such as with ASEAN Agreement on Disaster Management and Emergency Response and ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management to enhance its capabilities, including the establishment of early warning system and disaster response centres in safeguarding lives, livelihoods, and infrastructure especially after the massive 2004 Indian Ocean tsunami.

As discuss previously, the integration between government, private sector, and civil society had help Indonesia to be more structured, and systematic in dealing with disaster. Moreover, a Maritime Cooperation in the Indo-Pacific between Indonesia and India marked a maritime partnership focusing Andaman Sea and Nicobar Command (ANC) in India and the port of Sabang in Indonesia.

Lastly, Indonesian government had announced an initiative incorporating development agenda and the climate change such as adapting farming to climate change, optimal use of land, water and natural resources, conserving rainwater, early warning system for extreme weather events, protecting coastal zone, better urban planning and making infrastructure more resilient.

CHAPTER 5

Conclusion and Recommendations

5.1 Conclusion

The aim of this study was to determine the perspective of Humanitarian Assistance and Disaster Relief from Malaysia, Singapore, and Indonesia point of view, the significant efforts of Humanitarian Assistance and Disaster Relief frequency focuses on Malaysia, Singapore, and Indonesia, and lastly, to offer suggestions in which enhancing information sharing, interoperability, trust and relationship between Malaysia, Singapore, Indonesia, and ASEAN.

This research employing secondary data in form of interviewing subject matter experts, necessary documents, acts, regulation, and policies focusing on the humanitarian assistance and disaster relief, services magazines, journal, article, National Disaster Management Agency sources, and news. Published materials such as relevant research reports, articles, books, annual reports have been reviewed to support the secondary data.

5.2 Recommendations

After considering the perspective of humanitarian assistance and disaster relief from Malaysia, Singapore, and Indonesia point of view, and the significant efforts of humanitarian assistance and disaster relief frequency in these three countries, below are some suggestions in which enhancing information sharing, interoperability, trust, and relationship.

5.2.1 Enhancing Information Sharing

Before the establishment of biannual ASEAN Expert Group on Disaster Management meetings in 1971, ASEAN did not have any commitment to the regional humanitarian assistance and disaster relief. Moreover, ASEAN Member States has only signed the declaration on mutual assistance on natural disasters in 1976.

Through Special ASEAN Leaders' meeting in December 2004 (right after the massive Indian Ocean tsunami tragedy), ASEAN adopted a declaration of action to strengthen emergency, rehabilitation, reconstruction, and prevention during disaster relief.

ASEAN took its first step in regional disaster response after Myanmar struck with cyclone Nargis in 2008. The establishment of Tripartite Core Group in providing access for humanitarian organisation and act as coordinating centre for aid and ensuing recovery efforts. In addition, the deployment of ASEAN Emergency Rapid Assessment Team and activation of AHA Centre providing technical assistance, assessment the needs and facilitating in coordinating the aid efforts such as financial, food, medical supplies, and relief food.

Moreover, the development of Asia-Pacific Economic Cooperation Disaster Risk Reduction Framework initiative complements and strengthens the resilient framework of ASEAN. The recognising of Task Force for Emergency Preparedness work by APEC's elevated this task force into permanent Emergency Preparedness Working Groups that

is playing a constructive role in assisting and helping reducing risk of disaster and building business and community resilience.

5.2.2 Interoperability

The involvement of military and civilian in humanitarian assistance and disaster relief shaping the structure and influence on the humanitarian and disaster context. The establishment of Oslo Guidelines in 1992, giving a guidance for the involvements of Military assets and civilian in disaster relief efforts.

Furthermore, the United Nations guidelines called Military Civilian Defence Assets in supporting the UN humanitarian activities in complex emergencies providing guidance in such as when these resources can be used, how they should be employed, and how United Nations agencies should interface, organise, and coordinate with International Military Forces with regards to the use of military and civil defence assets.

Moreover, an Asia-Pacific Regional Guidelines was introduced during the fifth Asia Pacific Conference on Military Assistance to Disaster Relief Operations in 2010 for the use of foreign military assets during natural disaster responses in the wake of Indian Ocean tsunami 2004.

The establishment of Multinational Planning and Augmentation Team by United States Commander in Chief, Pacific Command helping to increase the operational level staff capability. The development of Multinational Force Standing Operating Procedures (MNF SOP) increases the speed to response, interoperability, mission effectiveness and unity efforts during crisis. Moreover, the staff planning workshop i.e. Tempest Express and Concept & SOP Development Workshop had developed common staff planning procedures and planning experts.

The UN Civil-Military Coordination efforts had supported the humanitarian operations with the presence of Military. The interaction ranges from coexistence up to cooperation and effective dialogue between the humanitarian organisation, state security forces, and non-state armed groups.

5.2.3 Trust and Relationship

Since founded, ASEAN has moved towards greater regional cooperation. A legally binding document on disaster management and emergency response called ASEAN Agreement on Disaster Management and Emergency Response is the most notable achievement for ASEAN as it addresses the disaster management and emergency response and consist of but are not limited to cooperation, coordination, technical assistance, and resources mobilisation (ASEAN Secretariat, 2016).

Post Indian Ocean massive tsunami in 2004 had showed most of ASEAN state members involved in relief work and humanitarian aid. The integrations between the whole society including the army, private sector, and civil society had help the members states to be more structured and systematic in dealing with disaster.

Moreover, the participation of ASEAN members state in joint exercises and training enhance their readiness and interoperability especially in humanitarian assistance and disaster relief. In addition, ASEAN members state often to shares its expertise, experiences, and best practices in disaster management among the state members including sharing information on disaster preparedness, early warning systems and innovative approaches to humanitarian assistance and disaster relief.

Furthermore, ASEAN member states provide material support and financial aid to affected areas. The bilateral engagement and agreements among the member states enhance the disaster response and relief initiative. ASEAN member state involvement in regional and international collaborations on disaster response and relief efforts enhances its capabilities, including safeguarding lives, livelihoods, and infrastructure.

The establishment of military-to-military coordination and response to disaster relief called Regional Humanitarian Assistance and Disaster Relief Coordination Centre and currently located in Singapore's Changi Command and Control Centre facilitate and support the military of the disaster-affected state in coordinating assistance provided by foreign militaries.

Moreover, the establishment of humanitarian assistance and disaster relief programme by S. Rajaratnam School of International Studies embark as a stepping stone to facilitate and enhance cooperation on preparedness and response strategies especially to regional emergency response frameworks, governance issues, and development of response for civilian and military actors.

In addition, the establishment of AHA Centre as the operational engine of ASEAN Agreement on Disaster Management and Emergency Response complement to operational strategies and procedures to enable rapid, jointly, and effective response to disaster within the ASEAN member's state.

5.3 Suggestion for Future Research Study.

This study is focusing on the perspective of humanitarian assistance and disaster relief from Malaysia, Singapore, and Indonesia point of view and the significant efforts of humanitarian assistance and disaster relief frequency in these three countries, thus

future study should investigate with other ASEAN country especially those seriously impacted with the natural disasters. Future study should also investigate other factors such as involvement of small country or less income country to humanitarian assistance and disaster relief in the context of ASEAN states members. Moreover, the contribution of those ASEAN member states in assisting affected member states.

5.4 Limitations of Study

Although this study has yielded some analysis and findings, there are still some limitations need to be noted as follows:

5.4.1 The data for this paper was collated through the secondary data in form of interviewing subject matter experts, necessary documents, acts, regulation, and policies focusing on the humanitarian assistance and disaster relief, services magazines, journal, article, National Disaster Management Agency sources, and news. Published materials such as relevant research reports, articles, books, annual reports have been reviewed to support the secondary data.

5.4.2 This research contains classified information; therefore, it will not be released to other party without the consent of the College.

5.4.3 The information given in this paper is only for academic purposes and not to be communicated directly or indirectly to the press or any person not authorised to receive it unless been approved by the College.

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INTERVIEW QUESTIONNAIRES GUIDES:

1. How is disaster management planning in the ASEAN region related to existing policies in Malaysia/Singapore/Indonesia?
2. What are the targets or goals of the AHA Centre if a disaster occurs in our country or in ASEAN countries?
3. How to carry out personnel training and develop disaster management infrastructure?
4. How is the Evaluation System implemented?
5. What is the suitability of the quality of personnel and supporting facilities in the future in the face of current climate change conditions?
6. What is the condition of cooperation with other ASEAN countries so far to support Disaster Management Policies?
7. How is the sustainability of the Disaster Assistance Management activities carried out so far in supporting the AHA Centre's policies?
8. What is the attitude of the governments of the ASEAN countries involved in disaster management?

CHAPTER 2

Literature Review

This chapter will discuss as much information on natural disasters with respect to Association of Southeast Asian Nations especially Malaysia, Singapore, and Indonesia as a member's states from other researcher views from previous study.

2. Introduction

ASEAN region prone to various natural disaster due to the geographical location. According to ASEAN Magazine (2023), there are 42 disasters responses were recorded (either for preparedness & assessment mission or emergency response mission) in the ASEAN region for the period of November 2012 until August 2023. For instance, typhoons frequently hit countries like Philippines and Vietnam in which causing damages and loss of life. While countries like Indonesia, Thailand and again Philippines are most likely to have earthquakes. A country like Malaysia is very seldom to have typhoons or earthquakes but prone to the effects of the seismic impact and the increasement of rainfall intensity that can contributes to flood.

A statistic data from ASEAN Disaster Information Network (2023) between 2012 until 2023, there are 5271 disaster cases happened and as to name a few such as 3707 cases of flood, 622 cases of tornadoes and 100 cases of tropical cyclones, 122 cases of earthquakes, and 42 cases of volcano eruptions (**Figure 5**).

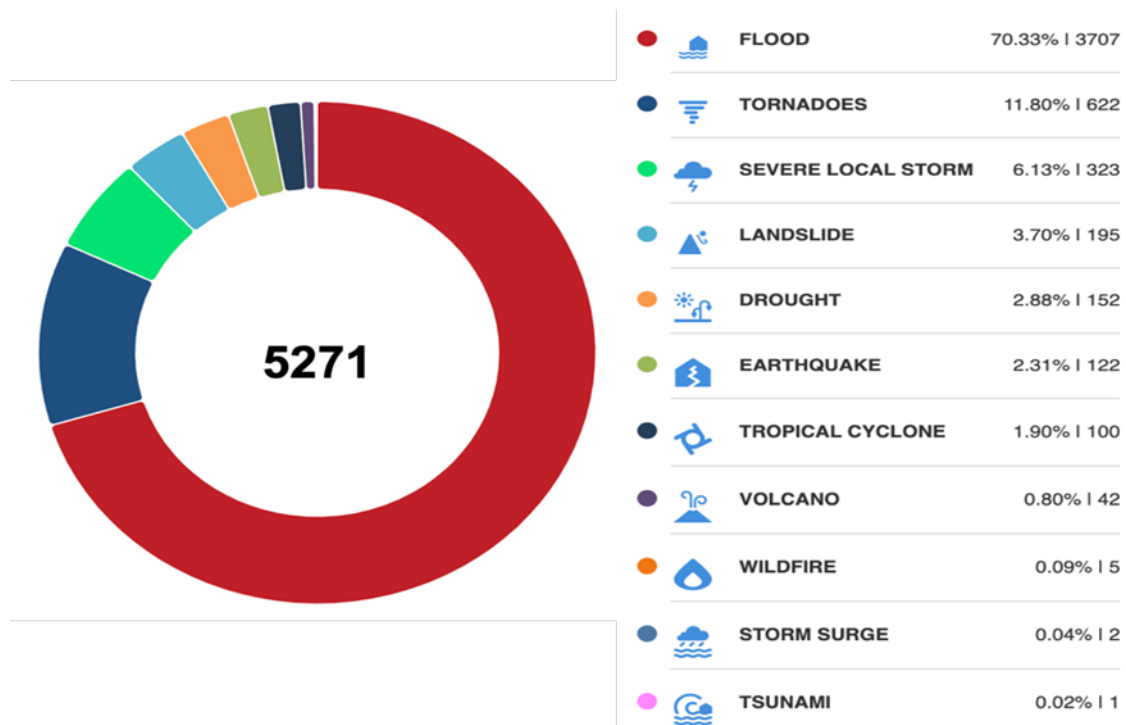


Figure 5: Disaster by the numbers in the ASEAN Region 2012 to Present

As mentioned in The Column (2023), in third quarters of 2023, there are 99 disasters were reported effected to seven member states namely Cambodia, Indonesia, People Democratic Republic of Lao, Myanmar, Philippines, Thailand, and Vietnam. The most occurrence disasters were flood in which occurred on the northern sides of the equatorial line impacting People Democratic Republic of Lao, Myanmar, Thailand, and Vietnam with Philippines is the most effected by the southwest monsoon namely tropical cyclone SAOLA, tropical cyclone HAIKUI and tropical cyclone of YUN YEUNG. The second highest disaster reported was droughts due to El Nino effects especially to the southern parts of the equatorial line impacting Cambodia and Indonesia especially southern of Sumatra, parts of Maluku Island and southern of Papua.

2. Malaysia and Devastating Calamities

Since Malaysia geographically is not part of the Circum Pacific -Belt or known as the Pacific Ring of Fire, comparatively Malaysia is known safe from the disaster especially the extreme natural disaster such as earthquakes, volcanic eruption, and tropical cyclones. However, there have been 21 earthquake cases detected in Sarawak and 94 cases in Sabah since 1874 (Marto, A, Soon, TC, Kasim, F, M Yunus, NZ, 2013).

Moreover, Malaysia location give common tropical experience with monsoon seasons such as El Nino-Southern Oscillation (ENSO), Indian Ocean Dipole (IOD) and Madden-Julian Oscillation (N A Isa et al, 2022), and as a result, in December 1996, the infamous north-east monsoon tropical windstorm 'Greg' direct hit the northwest coast of Sabah starting from Kudat down to Tuaran and to the interior region in Keningau and further to Tenom killed 238 people and destroyed more than 4,000 houses and left some 3,000 people homeless (New Straits Time, 2017)

Furthermore, the Indian Ocean earthquakes in 2004 had caused both co-seismic and post-seismic deformations for the whole of Southeast Asia and moreover the peninsular Malaysia has been displaced towards west southwest. This 9.0 magnitude catastrophic impacts, triggered an unexpected tsunami that struck Malaysia, Indonesia, Sri Lanka, and Thailand with total death count reached 230,000 people, whilst 1,7 million people displaced and cost more than US 15 billion to rebuild and recover (L. Auyeung, 2022)

To add for the worth, a heavy seasonal rain, and strong winds in 2014 had caused an urban and rural region submerged as rivers burst bank after heavy downpours (The Guardian, 2021). This worst flooding affected more than 541,000 people causing RM 2.58 billion extensive damage to infrastructure across eight states and territories namely Terengganu, Pahang, Kelantan, Perak, Johor, Selangor, Kuala Lumpur, and Perlis States (Zainal, A. 2015)

At the same time, Malaysia was shocked with series of slope failure and landslides, a common disaster related to flood resulting in property damages and threatening the lives of the population (Kwan Ben Sim, Min Lee Lee, Rasa RemenyePrescott, Soon Yee Wong (2023). The landslides referred to a downward movement of a large quantity of rock, rubble or dirt and a downslope movement of mass soil and rock under gravity (Solahuddin, A, Fadzil, M.Y., 2023).

There are several mud landslides happened and to name a few such as the collapse of a 12 storey block Highland Towers Condominium due to landslide in December 1993 killed 48 resident (**Figure 6**), a mud landslides in August 1996 at an aboriginal village Pos Dipang, Kampar Perak, killed 44 people (**Figure 7**), a mud landslide in December 2008 at Bukit Antarabangsa, Selangor (**Figure 8**) killed five people, destroyed 14 houses and force 2, 000 to be evacuated (Kazmi, D., Qasim, S., Harahap, I.S.H. et al, 2017). A mud landslide at Father's Organic Farm, Batang Kali, Selangor (**Figure 9**) in December 2022, claimed 24 lives and 61 survivors (Azrul, R. 2022).



Figure 6: A Collapse of Highland Tower Condominium in December 1993



Figure 7: Mud landslides at aboriginal village Pos Dipang, Kampar Perak in August 1996



Figure 8: Mud Landslide at Bukit Antarabangsa in December 2008



Figure 9: Mud Landslide at *Father's Organic Farm*, Batang Kali in December 2022

3. Singapore and Devastating Calamities

Singapore has not experienced to any natural disaster such as earthquakes, typhoon, and volcanos eruptions due to its location is out from the pacific ring of fire line. The challenges however are for the emergency services in preventing and mitigating potential risk namely haze from neighbouring country, flood during heavy monsoon season and occasional incidents such as building fires and traffic accident.

Basically Singapore experienced four distinct monsoonal seasons (UNDRR, 2020), determined by prevailing winds directions such as Northeast monsoon (December to early march), Inter-monsoon period (late March to May), Southwest monsoon (June to September) and another Inter-monsoon period (October to November) and these variations of climate patterns still have some impacts on local weather conditions,

rainfalls pattern and temperature fluctuation but not the same way as Malaysia or Indonesia or other ASEAN countries.

According to Asian Disaster Reduction Centre (2019), Singapore has been affected by severe haze in 2013 due to widespread land clearing fires in central of Sumatra (**Figure 10**). The average Pollutants Standard Index (PSI) showing a 401 (index ceiling is 500) the highest ever recorded 24-h moving average $PM_{2.5}$ concentration as to compare to the World Health Organisation guideline (Erik Velasco, Soheil Rastan, 2015). The widespread wildfires that raged across Indonesia's Island of Sumatra triggered the worst air pollution in Singapore. Furthermore, the combination of a two-month dry weather in the region added to the intensity of the smoke-haze events.



Figure 10: Severe Haze at Singapore Icon in 2013

4. Indonesia and Devastating Calamities

As to compare with Malaysia and Singapore, Indonesia are the most disaster-prone countries experiencing various natural hazards such as earthquakes, tsunamis,

landslides, and volcanic eruption (USAID, 2023). They had suffered thousands of lives and economic losses up to USD three billion annually. According to CFE-DM (2021) in their Disaster Management Reference Handbook-Indonesia, there are 3,000 natural disasters happened across the country in any given year with averages of 90 percent or more of the events are hydro meteorological impact namely storms, tornadoes, and floods. This is due to its location in between the landmasses of Asia and Australia therefore exposes Indonesia to seasonal pattern of monsoon winds (CFE-DM, 2021).

The Indian Ocean tsunami in 2004 had caused significant devastation impact to Indonesia especially Aceh with 165,000 people died and ceased some vital public services. Furthermore, according to Japan International Cooperation Agency (2015), tsunamis caused the largest impact in terms of the number of deaths.

In September 2018, several earthquakes struck Central Sulawesi in Indonesia with the strongest earthquake reach magnitude of 7.4 on Richter Scale (**Figure 11**) with the epicentre in Donggala regency resulting tsunami waves generated and washed into Talise beach in Palu and Donggala (Jedrzej M. Majewski, Adam D. Switzer, Rachel Y.S. Guan, Benazir Benazir, Ella Meilianda, Peter R. Parham, Robert Weiss, Stacey S. Martin, Lillian K. Pearson, Jessica E. Pilarczyk, Patrick Daly, Benjamin P. Horton, 2023). More than 2,000 people are died with 1,350 people missing, over 130,000 people displaced from their home (OCHA Services, 2019)



Figure 11: Palu Bay After Tsunami Struck in September 2018

Additionally, three months later, in December 2018 part of Krakatau volcano collapse into the sea and displacing large quantities of water resulting another tsunami (**Figure 12**) and hit Banten province and the coast around Sunda Strait (OCHA Services, 2022). The Indonesia National Board for Disaster Management (Badan Nasional Penanggulangan Bencana) reported more than 400 fatalities, 14,000 people injured, almost 1,600 houses damage, destroyed and displacing more than 16.000 people (OCHA Services, 2022).



Figure 12: Carita Beach After Hit by Tsunami in December 2018

On the other hand, Japan International Cooperation Agency (2015) mentioned that the unregulated pumping of groundwater due to rapid urbanization, rapid changes in land used, the inability of its drainage system to cope and the often of its 13 rivers break their banks has made the Indonesia more prone to flooding (Figure 13).



Figure 13: Rescue Team Evacuated Resident During Deadly Flood at Jakarta in January 2020

A widespread flash flooding and landslides prompting the evacuation of more than 31,000 people, killed 16 people, injured 100 other and damaged or destroyed hundreds of homes and building during 2020 New Year's Day (**Figure 14**) especially in Jakarta, North Sumatra, West Java, and Bengkulu. (IFRC, 2020).



Figure 14: Submerged Car during Flood at Jakarta in January 2020

Currently heavy rainfalls have been affecting central Indonesia especially Cilacap Regency and Grobogan Regency since earlier February this year causing floods and landslides resulting casualties and damage (European Commission's Directorate-General for European Civil Protection and Humanitarian Aid Operations, 2024).

Indonesia is also known as windows of volcanic world with 147 volcanoes and 76 of it are the active volcanoes (Eko, H and Liliyasi S., 2018). As reported by Meteorological, Climatological dan Geophysical Agency (BMKG) of Indonesia and Philippine Institute for Volcanology and Seismology (PHIVOLCS) for the period of August 2023, there are 30 significant earthquakes including tectonically active (generating seismic activity or erupting of lava or releasing of gas) with more than 5.0 magnitude from four monitoring places in Indonesia namely Mount Semeru, Mount Ili Lewotolok,

Mount Ibu, and Mount Dempo and three monitoring places in Philippines namely Mount Mayon, Mount Taal and Kanlaon Volcanoes (The Column, 2023).

The furious eruption of Mount Merapi (**Figure 15**) in December 2023 killed 11 climbers and 12 still missing (Al Jazeera, 2023). The Merapi spewed thick column of ash as high as 1,300 metres and spread hot ash over several kilometres and blanketed tonnes of volcanic debris to nearby villages and town (Reuters, 2024). Moreover, in January 2024, another eruption from Mount Lewotobi Laki-Laki in East Nusa Tenggara Province, Eastern Indonesia (**Figure 16**) spewed volcanic ash 1.5 km above its peak resulting more than 2, 000 residents have been evacuated to safe zones as to avoid unwanted things (The Straits Times, 2024)



Figure 15: Mount Merapi Eruption on December 2023



Figure 16: Mount Lewotobi Laki-Laki Eruption on January 2024

2.5. ASEAN and Devastating Calamities

Below are some of the devastating calamities that caused unparalleled loss of life and inflicted extensive economic damages with responses from ASEAN member states.

2.5.1 Huge Forest Fires

In August 1997, a huge land and forest fires resulting a transboundary smoke-haze pollution affected in wide parts of the Southeast region especially in Malaysia, Singapore, and Indonesia due to emission of estimated 46,000 square metre of vegetation that burnt in the Indonesian Island Kalimantan and Sumatra (Heil, A.,

Goldammer, J., 2001). It is estimated to cost the region more than USD 9 billion losses significantly in term of economic, social, and environmental (**Figure 17**).



Figure 17: Smoke-Haze Pollution at Kuala Lumpur City in 1997

The haze-related impact contributed to ecological damages such as the production of ozone, acid rain and greenhouses gases. Furthermore, the haze reducing the crop productivity especially reduction of photosynthesis in plants. A part of that, haze caused health effects such as skin ailments, eye irritation, asthma, allergies, difficulty in breathing, decreased lung function, cardiovascular diseases, and many other human health issues (ASEAN Secretariat, 2024)

2.5.2 Cyclone NARGIS 2008

According to Easton, RJ (2015) study, the response to Myanmar marked a significant first moment for ASEAN member states efforts to coordinate regional disaster response in sending relief assistance when this country stuck by cyclone NARGIS on May

2008 (**Figure 18**). A total of 37 townships and 2.4 million people were affected, with 84,500 people were killed, and 53,800 went missing (IFRC, 2011).



Figure 18: Aftermath of Cyclone Nargis at Myanmar in 2008

ASEAN assumed a leadership role in managing the international efforts and convincing Myanmar to open its borders to international aid. The deployment of ASEAN Emergency Rapid Assessment Team (ASEAN-ERAT) to Myanmar consisted of experts from ASEAN countries who provided technical assistance and conducted assessment to determine the needs on the ground.

Moreover, the AHA Centre was activated to facilitate the coordination of regional assistance in coordinating aid efforts and responding to the immediate needs of affected communities. Furthermore, ASEAN member states including Malaysia contributed financial aid, relief supplies, and humanitarian assistance including food, shelter, medical supplies, and other forms of aid.

2.5.3 Thailand Floods 2011

The 2011 flood was the worst flood affected numerous provinces across Thailand with most damages and loss concentrated in the industrial estates and residential area located in Bangkok, the adjacent provinces to the north and west Bangkok and the farm areas in some provinces in the Lower Northern region and Central Plains (Poaponsakorn,N. Meethom,P, 2013).

According to Gale, E.L, Saunders, M.A. (2013), the flood estimated losses of USD 30 billion in term of economic and USD 12 billion in term of Insured loss ranks.

The flood resulted from La Nina in which reservoirs exceeded their threshold storage level to prevent floods. An unusual heavy monsoon rains causing overflow of major river namely the Chao Phraya Rivers contributing to the severity and prolonged floods (**Figure 19**).



Figure 19: The 2011 Thailand Worst Flood

As part of ASEAN's disaster management framework, ASEAN Committee on Disaster Management (ACDM) facilitate coordination among ASEAN member states and worked closely with Thai authorities as to provide assistance and support.

2.5.4 Typhoon HAIYAN 2013.

Typhoon HAIYAN or better known as YOLANDA by the local people landfall in Philippines in November 2013 as a category five according to Atlantic hurricane on the Saffir-Simpson scale and it was one of the strongest tropical cyclones ever recorded (Carpenter, O., Platt, S., Mahdivan, F., 2018).

This typhoon struck the central island groups especially eastern Visayas including the provincial capital of Tacloban. An intense rainfall was recorded in which increased flood water levels and contributed to structural damage due to hydrostatic pressures and non-structural damage due to water ingress.

The ACDM was involved in coordinating responses and support efforts to Philippines. Furthermore, ACDM helped to organised and channel assistance from ASEAN member states to the affected areas including resources, aid, and support (**Figure 20**).



Figure 20: Aftermath of Typhoon Haiyan at Philippines in 2013

Moreover, the deployment of ASEAN-ERAT in which the team providing technical expertise, assessments, and assistance in coordinating relief efforts. ACDM is also playing role in mobilising the humanitarian aid and resources from ASEAN member states and international partners including relief supplies, equipment, financial aid, and personnel to Philippines.

2.5.5 The 2018 triple disaster as an earthquakes, tsunami, and liquefaction in Central Sulawesi.

In September 2018, the Central Sulawesi region of Indonesia was subjected to a series of earthquakes with the most recorded earthquakes at a 7.5 magnitude caused extensive damages to buildings, infrastructure, and homes (Darma, Y., Sulistyantara,

Yonvitner, 2020). According to Reliefweb (2019), this triple disaster killed 2,227 people, and displaced 165,000 persons.

These earthquakes were then followed by numerous aftershocks and triggered a seismic activity and underwater landslides resulting tsunami waves of heights up to 6 metres that struck the coastal areas of Palu, the capital of Central Sulawesi. Subsequently, the earthquakes and tsunami liquified the solid soil resulting the entire ground engulfed and swallowed homes and people under mud and debris (**Figure 21**).



Figure 21: Central Sulawesi Quake with Ground Open

The AHA Centre as coordinator and focal point within the ASEAN region, facilitating the disaster management and emergency response, channelling support from

various countries and organisation as to ensure a coordinated and effective response to the disaster.

The deployment of ASEAN-ERAT to assist the Indonesian authorities in evaluating the needs of the affected communities including providing support and assessments of the situation. Moreover, ACDM helped in coordinating the provision and distribution of humanitarian aid, including food, shelter, medical supplies, and other essential items to the affected areas.

Furthermore, ACDM disseminating information and ensuring a coherent approach by coordinating activities among the responding agencies.

2.5.6 Coronavirus Disease 2019

The coronavirus disease 2019 (COVID-19) pandemic resulting 14.91 million death, 130 million survivor and 155 million world confirmed cases in the 24 months between January 1st, 2020, and December 31st, 2021 (WHO, 2022). According to UNICEF (2021), the outbreak continuously affects the populations especially people living in poverty, older persons, person with disabilities, youth, and indigenous peoples (**Figure 22**).



Figure 22: COVID-19 Diagnosis and Management

An establishment of Special Working Committee on COVID-19 between Malaysia and Singapore was formed as to ensure the safe and sustainable movement of goods, people, and services between both countries (Singapore Ministry of Foreign Affairs, 2020). Furthermore, a Joint Committee headed by both deputy Health minister following the spread of 2019-nCoV was established with the objectives to strengthen ongoing cross border efforts, shared information in the public health sector, medicine and to manage and tracing person identified with the coronavirus (Yusof, TA, 2020). This committee too is to address this pandemic effectively by conducting research and studies.

During 37th ASEAN Summit hosted by Vietnam on mid of November 2020 via video conferences, Malaysian Prime Minister through the 15th East Asia Summit (15th EAS) urged all participating countries to continue cooperating and to jointly address the devastating effects of the COVID-19 pandemic especially to find vaccines and anti-viral medicines as to prevent the virus from further spreading (Malaysia Prime Minister Office, 2020).

2.6 Economic Impact

Commonly the Southeast Asian regions has endured numerous disasters such typhoons and cyclones, leading to strong winds, heavy rainfall, storm surge and flooding especially countries like Philippines, Vietnam, and Thailand. The occurrence and severity of these natural disaster can vary from year to year and give a significant impact to the ASEAN member states.

Additionally, member states such as Indonesia, Malaysia, Cambodia, and Myanmar facing annual flooding due to monsoon rains, rivers overflows and inadequate

drainage systems. Moreover, these countries are susceptible to landslide due to hilly and mountainous landscape.

Since the geographical location of nations like Indonesia and Philippines are near to tectonic plate, making them prone to earthquakes in which can trigger tsunamis and landslides. Indonesia too, with its numerous active volcanoes faces volcanic eruptions that can caused damages to nearby regions. ASEAN member states are also experienced drought especially countries like Vietnam and Thailand due to irregular rainfall patterns affecting agriculture and water supply.

The disaster often causes substantial damage to infrastructure including roads, bridges, building and utilities thus increased cost in repairing or rebuilding the facilities and can hinder the economic development. Since the ASEAN is heavily rely on agriculture, the disaster such as droughts, storms or floods can devastate crops, leading to reduction of the production therefore affecting the food chain and the food security and creating increment of food prices and instability economic consequences.

The natural disaster can disrupt supply chains especially the manufacturing industries and logistics. This disruption can lead to productions delay, increase of cost, and reduce trade within the region and globally. Furthermore, the small and medium enterprises (SMEs) in which constitute a significant portion of ASEAN's economy, are particularly vulnerable to the effects of disaster. The interruptions to the business, inventory damages, revenues losses can severely affect the operations and financial stability.

Due to disaster too, the country that rely most to tourism as major source of income will have a long-term impact to the industry such as safety concerns and damages to tourist infrastructure.

As a government, a significant financial resource is also needed in determine roles and responsibilities to the humanitarian needs such as to fund on relief and healthcare, rebuilding, and rehabilitation the communities, established coordination mechanism and include disaster risk management in existing or new policies and regulations due to disasters causes loss of lives, injuries, and displacement of populations.

In a nutshell, the occurrence and severity of these natural disasters can vary from year to year and have significant impact to ASEAN especially the affected member states, resulting to economic losses, death, and property destruction (ASEAN Specialised Meteorological Centre, 2023).

CHAPTER 3

Research Methodology

This chapter will discuss about research methodology consisting of introduction, research setting, research instrumentation, data collection procedure, data analysis, and research beneficial expectations.

3.1 Introduction

As to ensure a useful and reliable data were collected, certain procedures were remained and deemed to be necessary in this study. The whole element is very important and valuable in research study because it is the key to successful research which include the validity and reliability of the data gathering.

3.2 Research Setting

This study will focus on the perspective of Humanitarian Assistance and Disaster Relief from Malaysia, Singapore, and Indonesia point of view, the significant efforts of Humanitarian Assistance and Disaster Relief frequency focuses on Malaysia, Singapore, and Indonesia, and lastly, to offer suggestions in which enhancing information sharing, interoperability, trust and relationship between Malaysia, Singapore, Indonesia, and ASEAN.

3.3 Research Instrumentation

This study utilises a set of interviewing and a library research design; where this study was referencing through several interview to Subject Matters Expert, necessary documents, acts, regulation, and policies focusing on the humanitarian assistance and disaster relief, services magazines, journal, article, National Disaster Management Agency

sources, and news. Published materials such as relevant research reports, articles, books, annual reports have been reviewed to support the secondary data.

3.4 Data Collection Procedure

The data for analysis was collated through the secondary data in form of interview to Subject Matters Expert, necessary documents, acts, regulation, and policies from relevant Agency sources, and news. Published materials such as relevant research reports, articles, books, annual reports have been reviewed to support the secondary data.

3.5 Data Analysis

Data analysis refers to the process of converting data from one format to another. It transforms plain data into valuable information and information into data. Successful data archiving requires the careful choice of formats in order to strike a balance between effective archival preservation and the provision of data in widely available and well-supported software formats to enable easy secondary use.

3.6 Research Beneficial Expectations

3.6.1 To understand the perspective of Humanitarian Assistance and Disaster Relief from Malaysia, Singapore, and Indonesia point of view.

3.6.2 To understand the significant efforts of Humanitarian Assistance and Disaster Relief frequency focuses on Malaysia, Singapore, and Indonesia.

3.6.3 To provide suggestions in which enhancing information sharing, interoperability, trust and relationship between Malaysia, Singapore, Indonesia, and ASEAN.

