

# CHAPTER I

## INTRODUCTION

### A. Background

Disaster recently is considered as an important issue in the world because there is a lot of suffering for human that is caused by disaster, among others loss of life, loss of material and property, environmental damage and the destruction of development which has been achieved such as damage to facilities and infrastructure, public facilities and so forth. Hence, disasters tend to be considered as having adverse effects on a nation-state. Nevertheless, a state can utilize disaster issue within a state in order to be an opportunity in cooperation with other states, so that it can be seen as a problem that will give not only negative effect but also positive effect for a nation state if it is managed properly. Furthermore, according to Louise K. Comfort, nowadays disaster issue becomes a very crucial issue to the enhancement of the quality of human welfare (Herningtyas & Surwandono, 2017).

According to the EM-DAT as an emergency disaster database that was managed by CRED (Center for Research on Epidemiology of Disasters), it showed that the number of the disasters were rising continually every year, in which there were 78 disasters in 1970 that were reported and it increased to 348 disasters in 2004. There were several disasters that triggered an increase in the number of disasters at that time, such as droughts, tsunamis, hurricanes, typhoons, and floods (Than, 2005). The total natural disaster, according to CRED, continually has still been increasing from 1994-2013 (Zee, 2015). Climate change that was linked to terrible flood and storm disasters was considered to be one of the causes in enhancing the frequency of natural disasters in this decade. There was the enhancement of floods from 1980 to 2000, in which it was recorded 150 flood disasters in 2000 and it tripled the number of disasters since the 1980s. Not only floods but also storms have increased to be triple from the previous. Based on

EM-DAT on international data, the enhancement of natural disasters also has increased in the last 60 years for about 600% (Asia Development Bank, 2013).

Based on the number of disasters in the worldwide (2004-2013), Asia was the most disaster-prone continent among other continents such as Oceania, Europe, Americas, and Africa. It was reported that the number of disasters in Asia (2012) was 210 disasters with 8360 people killed, while the least affected continent was Oceania with 14 disasters with 433 people killed. Europe in 2012 had experienced 91 disasters with 1704 people killed, America had 115 disasters with 2060 people killed, and Africa had 123 disasters with 3028 people killed. In addition, the number of disasters in Asia increased to 229 disasters with 22875 people killed in 2013. However, these only referred to the natural disasters such as droughts/ food insecurity, earthquakes/ tsunamis, extreme temperatures, floods, forest/ scrub fires, insect infestation, mass movement:dry, mass movement:wet, volcanic eruptions, windstorms; as well as the technological disasters, such as industrial accident, miscellaneous accident, and transport accident. Hence, these did not relate to the disasters that involved wars, conflict-related famines, diseases or epidemics. Among the natural disasters in the last 10 years (2004-2013), floods were the most frequent in every year and windstorms were the second highest. In 2013 floods were for about 44,2% with 43,7% or 9,819 people killed and windstroms were for about 31,5% with 41,0% or 9,215 people killed. While among the technological disaster, transport accidents were the most frequent for about 70,8% with 56,6% or 3,801 people killed. Every continent encountered the same problem, namely flood, but the highest number of flood disasters occurred in Asia with 702 flood disasters during the last 10 years. Nonetheless, transport accident became the highest disaster in Africa with 719 accidents and Asia became the second highest with 588 accidents. Even though frequency of flood disaster in Asia was high, total number of people reported killed, by type of disaster

phenomenon, were 423,927 from earthquakes/ tsunamis (IFRC, 2014).

These natural disasters were more risks for people in Asia and the Pacific regions, where recently it becomes 25 times more likely than in Europe and 4 times in Africa (Asia Development Bank, 2013). Asia and the Pacific regions, according to UN statistical yearbook for Asia and the Pacific in 2014, were the most vulnerable regions in the world related to natural disaster (Herningtyas & Surwandono, 2017). There were 160 of 344 world disasters in 2015. Moreover, it had resulted over 160,000 fatalities and it meant that it increased more than a two-fold since 2014. Asia and the Pacific in 2015 already suffered huge losses, in which the government had to provide more than 45,1 billion US dollar for economic damage (UNESCAP, 2015). The region geologically lies above the active tectonic plate in the Pacific and Indian Oceans, so that it can be the source of major earthquakes and tsunamis if there are movements in the plate. In addition, the Indian and Pacific Oceans can trigger tropical cyclones and typhoons. The region also has many young mountains which can cause earthquakes, landslides, flash floods, avalanches, and Glacial Lake Outburst Floods (GLOFs). The frequency and intention of floods and drought is determined by the weather and climate systems (UNESCAP, 2015).

Malaysia is one of the states in Asia that tends to be susceptible towards natural hazard (UNISDR, 2010). Actually, Malaysia geographically lies on the outer side of the Pacific Ring of Fire so that the disasters in Malaysia are not as bad as other states in the area of the Pacific Ring of Fire. Nonetheless, there are some natural hazards that occur in Malaysia, such as cyclonic storm, flood, tsunami, seismic activity, forest fire, landslide, haze (at local and transboundary), and epidemic. In addition, there is the enhancement of disaster that is related to the climate change in Malaysia, so it has become new problem to health and development of Malaysia (Center for Excellence in Disaster Management & Humanitarian Assistance, 2016).

Based on Internationally Reported Losses 1990 – 2014 EMDAT, the highest frequency of disaster in Malaysia was flood (62,5%), while other disasters in Malaysia were storm (12,5%), landslide (8,3%), wildfire (8,3%), drought (4,2%), earthquake (2,1%), mass movement-dry (2,1%). Even though flood became the most frequent disaster, the highest mortality in Malaysia was caused by storm (39,9%), whereas flood was the second highest (24,1). Fatalities also could be induced by some disasters such as landslide (13,9), earthquake (11,6), mass movement-dry (10,4%). Moreover, economic damage emerged as a result from the occurrence of disasters in Malaysia. Some disasters that were related to economic issues were flood (60%), earthquake (23,4%), wildfire (14,1%), storm (2,5%). From the previous data, we could see that although storm became the second highest in the term of frequency and the highest in the term of mortality in Malaysia, it had the lowest percentage in the term of economic losses (UNISDR, 2015).

The major disaster in Malaysia is a flood. It becomes an annual disaster in Malaysia. Every year, floods in Malaysia has caused economic damage around RM 915 million, affected 4,82 million people, and it is also estimated around 29,800 square kilometers that have been affected by the widespread flood (Asian Disaster Reduction Center, 2011). Floods in 2014 had caused the infrastructure damage that was estimated at around 670 million U.S. dollars (RM 2,851 billion) and it became the worst in the history of the state. Furthermore, the previous areas, that were never submerged, had also been affected by the flood. Meanwhile during 1900-2009, there were 60 recorded landslides that caused 611 fatalities. It traditionally was caused by the public interest, especially when it happened in the urban area. In addition, Malaysia also encountered haze disaster that was caused by industries, motor vehicle, open burning and power generation. It was measured by the Air Pollutant Index (API). However, haze in Malaysia usually was the direct impact from “slash and burn” activities in Indonesia. Therefore, it became the trans-boundary problem, so that in resolving the problem of haze, Malaysia collaborated with other states to

minimize any risks and effects of haze based on Trans-Boundary Haze Pollution 2002 that was contained in the framework of ASEAN Agreement. As a result of Indonesia haze, Malaysia had ever experienced high pollution in the term of haze. At that time, API index was above the normal limit (unhealthy levels) in Malaysia, so it could lead respiratory health problems because the haze from this fire was highly toxic. Therefore, there were some reactions from government, such as every school closed; citizen could not leave their home; the flight was disrupted (delayed or canceled); as well as ships could not operate due to visibility disruption (Center for Excellence in Disaster Management & Humanitarian Assistance, 2016).

Hence, disaster has become a problem for all of the states in the world, especially Malaysia. Even though based on the Inform 2017 Risk Index, it shows that Malaysia is estimated to have the risk of disasters for about 3,4% and it is classified in low disaster (UNISDR, 2015). However, Malaysia remains to be a vulnerable area of disaster, followed by the number of fatalities, economic damage, and destruction. Therefore, the Malaysian government should be able to manage the disaster so that it does not only give the negative effect for the state but also can give the positive effect from this catastrophic condition, in which they can get the advantages, especially on the growth of intensive cooperation among states.

## **B. Research Question**

Based on the illustrated background aforementioned, the question which serves as a point of analysis is:  
How is the disaster diplomacy of Malaysia as an instrument to enhance international cooperation?

## **C. Theoretical Framework**

For answering the proposed research question, this research uses the concept of disaster diplomacy to analyze the phenomenon that has been described above.

### **Concept of Disaster Diplomacy**

Disaster diplomacy originally comes from 2 words, namely diplomacy and disaster. According to Sir Ernest Satow, “diplomacy is the application of intelligence and tact to conduct of official relations with vassal states or more briefly still, the conduct of business between states by peaceful means”. In this context, skills and expertise become the important instrument in conducting diplomacy and it will be more effective when it is run by an actor that have unusual skills and expertise. In addition, diplomacy, based on Bruce Russett and Harvey Starr, “is as a means by which a state directly influences another”. Means in the definition is defined as a tool that can influence other states. Not all states have complete means (as a tool) that can be options for conducting diplomacy. There are some states that have limited means, so they must think creatively to utilize the resources, abilities, and conditions that are owned by those states. Hence, disaster, that is considered by the state as negative issues, is utilized by the actor of diplomacy as a medium or tool in conducting diplomacy in order to reach its national interest. Disaster, according to the Constitutions on number 24 year 2007 regarding disaster management, is “events or series of events that threaten and disrupt people’s lives and livelihoods caused by both natural and / or non-natural factors and human factors resulting in the occurrence of human casualties, environmental damage, property loss, and psychological impact” (Herningtyas & Surwandono, 2017). Furthermore, according to UNISDR, “disaster is a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environment losses and impact, which exceeds the ability of the affected community or society to cope using its own resources” (Kelman, 2012).

There are two concepts that are distinguished by Kelman related to disasters, namely natural hazard and natural disaster. Hazard as a phenomenon of natural disasters will not cause the destructive effect. It can occur if technically and politically there are prevention and preparedness efforts that are well done. Hence, the hazard will not be a disaster. Nonetheless,

if disaster cannot be avoided, the phenomenon will be managed properly so it will be able to give benefit for region or state that is impacted by the disaster. Based on this view, there is disaster diplomacy that works within it, in which it shows that the crisis from the effects of disasters can be a meaningful opportunity (Herningtyas & Surwandono, 2017).

Disaster diplomacy in the literature definition is considered as a study that discusses about before and after the disaster in order to understand how and why disasters contribute and not contribute to peace and conflict. Activities that are established before the occurrences of disaster in the context of this diplomacy are preventions, mitigations, and the efforts to reduce the casualties. However, after the occurrence of the disaster, disaster diplomacy discusses how conflict and peace can be influenced by the disaster. There is “adagium” in the second definition of disaster diplomacy, in which “if we do not want this occurrence, we must try to seek the opportunity to change the situation”. In addition, disaster diplomacy, according to UNSDR, explores how and why the reduction of disaster, either during pre-disaster (prevention, mitigation) or post-disaster (recovery), can contribute or not contribute to cooperation and peace. Based on Louise K. Comfort,

Disaster diplomacy examines the role of disaster-related activities not just in international affairs and international relations, but also in political conflicts not involving more than one independent state. Disaster diplomacy also embraces a wide definition of “disaster”, not just rapid-onset events such as earthquakes and industrial explosions, but also events which are more diffuse in space and time such as droughts, epidemics, and global changes. These latter events have been termed “chronic disaster”, “creeping changes” and “disaster conditions” among other terms (Herningtyas & Surwandono, 2017).

The concept of disaster diplomacy was first comprehensively analyzed by Ilan Kelman and Koukis (2000:214) with the basic question “do natural disaster induce international cooperation amongst countries that have traditionally been ‘enemies’?”. It is interpreted that even though disaster occurs at a local and regional level, it can create some opportunities in making bilateral relations among states that are related to cooperation in the term of disaster. In addition, it also will be able to encourage political cooperation in international level (Pelling, 2003). Kelman further explains that the role from disaster-related activities in disaster diplomacy discusses not only about international relations but also about political conflict in the independent state. Moreover, there is an interesting invention from a series of studies on the interpretation process of disaster into the disaster diplomacy discourse that has been done by the Cambridge Review. The study shows that disaster diplomacy tends to choose cooperation rather than conflict so that it will give a very wide opportunity for state that is involved in the conflict either in political interest or economic interest (Herningtyas & Surwandono, 2017).

Disaster diplomacy is different with disaster cooperation, in which it is more political than disaster cooperation (Herningtyas & Surwandono, 2017). Disaster diplomacy in special scope is considered as a strategy to capitalize disaster for political, social and economic purposes in political ways. However, disaster cooperation tends to lead to procedures for handling disaster technically such as preparation, mitigation, response, and reconstruction within the disaster technical framework (Herningtyas & Surwandono, 2014).

Based on the research and the history, tendency of activities that are related to the disaster never emerges new diplomacy. However, it can be a catalyst and proponent for diplomacy that has been going on before, either in cultural aspect; in economic aspect; or secret negotiation among constituents. Management of disaster issues within the

framework of disaster diplomacy can make disaster issues to be an opportunity for cooperation among stakeholders that can bring benefits to the wider community. The contemporary study that is done by Ilan Kelman shows that disaster in certain limitations can be managed to overcome political problem and conflict that have not been solved yet, either in national level or international level so that disaster is not always considered as a factor that is detrimental to society. Kelman also states that the disaster actually provides a great space for those who have potential as disaster-prone areas to find workable space to reduce the risks that are inflicted by the natural disaster itself and to enhance comprehensive cooperation in terms of politic, economic, social and cultural (Herningtyas & Surwandono, 2017).

Disaster diplomacy actually is run by a state. Nonetheless, recently there are new several actors in conducting disaster diplomacy, such as NGO (either local or international), mass media, communities, humanitarian institutions, individuals, and so forth. The emergence of those actors is induced by the development of globalization. Furthermore, based on the level of regulation, diplomacy can be classified into 3 types, among others: First, government-led diplomacy. It is diplomacy that is organized and managed by the state; Second, organization-led diplomacy. It is diplomacy that is driven by several organizations, such as United Nations, NGO, institutions, communities; Third, people-led diplomacy. It is diplomacy that is ruled by individual (Herningtyas & Surwandono, 2017).

There are 3 alternative outcomes as the result of disaster diplomacy, such as: First, disaster-related activities that occur in the short time (week or month) can, but do not always, influence and catalyze diplomatic activities that have existed such as trade links, cultural connections, and secret negotiations. It is called as a short-term output; Second, long-term output (more than 1 years). The outcomes of this term are classified as non-disaster factors and those factors significantly give more effects than disaster-related activities. This output

triggers the existence of changes, such as change of leadership, conflict resolution, distrust, and so forth (Kelman, 2012); Third, the outcome of disaster diplomacy is an unexpected outcome, so it is called by the opposite output. It inclines to aggravate the relations and it also reduces the effectiveness of disaster diplomacy (Herningtyas & Surwandono, 2017). From all outcomes that are caused by disaster, it explains that disaster-related activities do not become the main priority (Kelman, 2012).

Snyder further explains that by conducting disaster diplomacy, a state can judge how the policy of other states gives response toward disaster that has occurred so that it will be profitable in international interaction. In international relations, there is stagnation in the cycle of replaying policy so that disaster can be an opportunity for a state to start a new cycle based on this cooperation. According to Snyder, normative framework of disaster cooperation in the cycle is suitable with TIT-FOR-TAT strategy that is introduced by Robert Axelrod (Herningtyas & Surwandono, 2017), in which in this strategy states that

Tit-for-Tat disaster diplomacy refers to the potential that one state providing aid to another state could lead to a similar reciprocal gesture in the future, despite the conflict between the states. As well, the refusal of one state to provide aid to another state could lead to a similar reciprocal gesture in the future, perpetuating or creating conflict between the states (Kelman, 2005).

Hence, disaster diplomacy can significantly renew this cycle toward cooperation.

The second framework, that is presented by Louise K. Comfort and Kelman based on Holland (1995), is Complex Adaptive System (CAS).

This model focuses on the transition in different states of evolving social, economic, and political performance ... it recognizes that social systems engage, to varying degrees, in continuous learning and self-organization in reciprocal interactions with the environments in which they are embedded ... Literature addresses two basic issues regarding [complex adaptive systems]: 1) the conditions under which they emerge and function; and 2) the actual properties and mechanisms which characterize their operations. The two issues are interactive (Kelman, 2012).

It is considered as one of interaction strategies that is suitable for disaster diplomacy. This model has a role to undertake an assessment toward the process of area change that is threatened by a potential disaster or that has experienced acute distraction due to disaster. It also concentrates on the switchover of political, social, and economic changes in the region or country where the disaster occurred. As the impact of disaster, usually two states or regions with similar disaster potency and experience can be involved in disaster risk reduction cooperation, disaster research, data exchange, and provision of assistance each other, then finally, it will open other profitable cooperations (Herningtyas & Surwandono, 2017).

There are four properties that are owned by complex adaptive system model, in which those are required to be implemented in disaster diplomacy, among others: First, non-linearity. It is the situation where there is a huge difference in the result that is induced by small changes from time to time and it describes the friction between action and energy in the unit component of the system in order to gain common interest; Second, diversity. It emphasizes that there is difference respond of unit or individual toward the same incident in the term of idea, act, and interaction so that it can create a new flow between the

components. There are some parties that are involved in representing disaster diplomacies, such as politicians, diplomats, international organizations, non-government organizations, the media, the private sector, and individuals; Third, flow. It is considered as the current ideas, actions, and materials that are given to support the interaction between individual units. One of action flow in disaster diplomacy can be seen when diplomats carry security equipment to negotiation in the term of political interest or material flow in which disaster assistance is delivered to locations that are exposed to the disaster. In addition, by giving information through text, phone, email, or sending post, also it is recognized as an information flow that is occurred in disaster diplomacy; and Fourth, aggregation. It is the capacity of units to create repetitive patterns in interaction to fulfill the common goal. One of example is UN, in which UN has the capacity to collect the donation from other states in order to manage the disaster and it is held as a way to reach its common goal, namely peaceful world (Kelman, 2012).

Furthermore, there are three mechanisms of complex adaptive system, among others: The first mechanism is tagging. According to Comfort, “tagging facilitates the process of matching a unit seeking assistance with a unit providing assistance”. After the disasters occur in some states, the units of the rescue will attempt to fit their expertness toward the impacts of the disasters. Therefore, the states in international cooperation will seek some agreements with other states that have mutual interests, services, and tradable commodities in handling the impacts of the disasters; The second mechanism is the internal model. it “reflects the set of shared assumptions upon which reciprocal actions among components of the system are based”. Two states that are involved in conducting disaster diplomacy might discuss their companionship and their hostility each other or toward parties that are involved; The last mechanism is building blocks. It is building blocks which “are the elemental units of performance that are used in creating a complex set of recurring interactions, such as communicative acts”. In this

mechanism, it can be described from meteorological stations, in which it is considered the unit that has function to process, interpret and communicate data about weather so that it can give warning either in the short term or in the long-term (Kelman, 2012).

Moreover, Kelman explains that there are six disaster diplomacy qualitative typologies that can explain the pattern of disaster diplomacy among states (Kelman, 2012). Based on propinquity (neighbourliness), disaster diplomacy is a diplomacy that is seen from geographical aspect, such as: First, states have land border each other; Second, states actually are confined by land border, but they are restricted by narrow waters; Third, geographically states are not close but they are involved in the handling disasters by giving the assistance in order to consider the mutual aid (Herningtyas & Surwandono, 2017).

Disaster diplomacy that is based on aid relations is determined into 3 categories, such as: First, mutual aid. It shows that states who tend to encounter the similarity either in the threat disaster or in the disaster effect will assist each other in handling the occurred disaster; Second, combined aid. It is interpreted that there are two probabilities that might underlie the formation of cooperation between states in implementing disaster diplomacy, namely several parties that provide assistance for other parties that are involved in the conflict or parties that are implicated in the conflict provide assistance for other parties; Third, donor-recipient. In this category, there is a party that acts as a donor. Donor means the party that provides aid for others, while the party that accepts aid is called as donor-recipient. Furthermore, the role of donor-recipient tends to be unclear, but it sometimes fluctuate depending on the situation (Kelman, 2012).

According to Kelman (2007), the model of disaster diplomacy that is based on the level in managing disaster diplomacy has three tracks. First, government-led disaster diplomacy. It means that government as the main actor in handling disaster diplomacy. Second, organization-led disaster

diplomacy. It is level, in which there are some groups that are not parts of the government, such as the private sector, the media, the research institutions, lobby groups, United Nation (UN), and Non-Governmental Organizations (NGOs). At this level, they are the ones who will conduct disaster diplomacy. Third, people-led disaster diplomacy. It is interpreted that support or implementation of disaster diplomacy is conducted by individual but it can also be encouraged by government (Kelman, 2012).

Kelman further explains that disaster diplomacy model can be classified by the purposes of interaction. First, the purpose of disaster diplomacy is survival of oneself. Second, the interaction purpose in disaster diplomacy is mutual benefit. Third, its purpose is to gain the global benefits for long-term, even though there is self-sacrifice in the short term. Fourth, re-confirmation toward old suspicion and hostility becomes one of the interaction aims that can give effect to the interest of disaster diplomacy. Fifth, the purpose of disaster diplomacy is to prove the humanitarianism. States that have bad relationship utilize disaster diplomacy as an opportunity to support the global humanitarian effort by conducting the bilateral cooperations toward others. Hence, it will be seen as a concern for humanitarian (Kelman, 2012).

The form of disaster diplomacy can be distinguished into intrastate diplomacy and interstate diplomacy. Intrastate diplomacy is a diplomacy that aims to resolve problems or conflicts that occur between groups within a state. While interstate diplomacy is a diplomacy that is conducted by states to resolve international conflict. It can also be implemented to build soft power for a state. In addition, despite the role in conducting conflict resolution and in building soft power are handled by the central government, para-diplomacy also becomes one of the decisive factors in supporting the realization of this goal. (Herningtyas & Surwandono, 2014).

Also, disaster diplomacy can be distinguished by two characteristics of diplomacy, namely active disaster diplomacy and passive disaster diplomacy. Both of them have differences,

where in active disaster diplomacy, it attempts to explain about when and how disaster diplomacy can be implemented so that the actors of diplomacy in this model tend to create an opportunity to improve international relations via disaster-related cooperation by using media or conducting negotiation with governments. While in the second model, diplomacy that is conducted to handle disaster does not have relation with diplomatic activities. It occurs because the actor of diplomacy does not realize or seek the potential of disaster that can be an opportunity for a state (Kelman, 2006).

Disaster diplomacy can increase soft power among states. Soft power, according to Snyder, can be obtained by conducting disaster diplomacy. The concept of soft power, that is popularized by Joseph Nye, is the ability to influence others to gain its interest without coercion. State that decides to choose soft power as its diplomatic power base will tend to establish cooperation in realizing its goal. The state will be respected by others states when it gives many assistances in managing the disaster. Therefore, in international interaction, it can indirectly enhance the bargaining position of the donor state (Herningtyas & Surwandono, 2017).

In the study of disaster diplomacy, for conducting capitalization towards disaster, it is required adequate tools to be able to carry out effective diplomacy and to fulfill the specific interests of a country. There are two minimal devices that a country must have, namely structural framework and operational framework. In the structural framework, there is a legal framework, such as constitutions, government regulations, local regulations, and others so that it also will be a legal protection for the implementation of diplomacy within the state. In contrast, in the operational framework, there are some instruments, such as apparatus, bureaucracy, and organization within a state that will hold disaster diplomacy (Herningtyas & Surwandono, 2017).

#### **D. Hypothesis**

Based on the description above, this thesis research develops the hypothesis that the disaster diplomacy of Malaysia as an instrument to enhance international cooperation is by using Complex Adaptive System (CAS) in disaster diplomacy through two mechanisms, as follows:

First, Malaysia uses the mechanism of tagging to determine the suitability between units providing assistance, namely the Malaysia government agencies and units needing assistance, namely the communities that are affected by the disaster in the mechanism of disaster management, where it depends on the coverage of the impact area, as well as the scale and characteristics of the disaster so that the disaster management of Malaysia is divided into 3 level. Hence, in the level 3, it will trigger the international cooperation among Malaysia and other states, other international institutions, or other international organizations that are mutual interests, services, and tradable commodities.

Second, Malaysia uses the mechanism of building block as the number of actions to increase international cooperation between Malaysia and other states, other international institutions, or other international organizations under procedure or framework of the repeated interaction to handle the disaster in the form of MoU (Memorandum of Understanding).

Hence, the overall mechanisms in the complex adaptive system will be able to reduce the disaster risk and also can trigger the enhancement of international cooperation of Malaysia with other states.

#### **E. Purpose of Writing**

This thesis research has several purposes, among others:

1. Describes how the disaster issues give impact to Malaysia.
2. Describes the decision-making process of Malaysia in managing the disaster.

3. Describes the disaster diplomacy of Malaysia as an instrument to enhance international cooperation.

## **F. Methodology of Research**

### **1. Type of Research**

There are three types of research designs in the research methodology, such as: research designs in case of exploratory research studies, research designs in case of descriptive studies, and research designs in case of casual research studies. This research uses research design in case of descriptive studies, in which in this type, it can describe the phenomena that are happening. Moreover, the purpose of this research is very specific and it also engages a large sample that is showed through probability sampling (Bhattacharyya, 2006). Hence, the descriptive model will be able to observe the disaster diplomacy of Malaysia as an instrument to enhance international cooperation.

### **2. Type of Data**

Type of data in the research methodology is distinguished into two types, namely: quantitative data and qualitative data. The data that are in the form of words, sentences, or images are called qualitative data. Nonetheless, qualitative data can be changed to be quantitative data so that it will be nominal and ordinal data. On the other hand, the type of quantitative data is the data in the form of numbers and also it can come from qualitative data that have changed to the number (Gani & Amalia, 2015). This research aims to make the descriptions to be more systematic, factual, and accurate that are related to the fact and the object of the research. Therefore, type of data that is analyzed by the researcher in the thesis about the disaster diplomacy of Malaysia as an instrument to enhance international cooperation uses the type of qualitative data, where it is the data that come from the results of data collection that are interpreted into words so that those can be composed.

### **3. Technique of Data Collection**

In the technique of data collection, there are two methods, namely method of primary data collection and method of secondary data collection. In the first method, the data are collected by observation, questionnaire, experimentation, interviewing, or case study method. Hence, in collecting primary data, the methods demand a high degree of skill in order to ensure that the data are unbiased and representative highly. In contrast, the methods of secondary data collection usually are taken by several data that are published or unpublished, such as: All kinds of publication from central, state, local governments; All kind of publication from foreign governments, or from international bodies, and their branch organization; Technical and trade journals; Book, newspapers, and magazine; Publications or reports from several association related to banks, universities, business and industry, economists, and so forth; Reports analyzed by several scholars, universities, economists, etc; Document from statistic, public records and other published informations (Bhattacharyya, 2006).

Methods of data collection, according to Jonathan, can be distinguished from several forms, namely: participation, observation, in-depth interview, document review, elite interviewing, focus group interviewing, narration, life history, historical analysis, movies, photos, and videos. Document review is considered as a method that will not disturb the object or the situation of the research. Moreover, it can assist to understand the value and culture embraced by the object under study. Documents that are used to the research are related to the content analysis. Therefore, the method to analyze the contents of the document is by examining documents systematically and observing forms of communication in the form of documents objectively. Hence, data which is obtained through document review can be categorized into the secondary data collection. In the secondary data

collection, there is a method that uses data collection through online. The internet is considered as a quick and easy data collection tool. The existence of sophisticated search tools and servers that is saved in the world will be able to facilitate researchers to conduct research online. Therefore, online data collection is a search by using a computer that is conducted through the internet that its network is connected all over the world (Sarwono, 2006).

In an effort to build objectivity in this thesis research, data collection is done through several stages:

First, data collection from the book. There are some books that are used by researcher such as disaster diplomacy book that is written by Ratih and Surwandono (2017), namely *Disaster Diplomacy: History, Opportunity, and International Organization*, where it becomes the primary data for the researcher in order to understand about disaster diplomacy. There also is Kelman book that is titled *Disaster Diplomacy: How Disaster Affect Peace and Conflict*. It becomes the guide in completing the understanding of researcher about disaster diplomacy that has more discussed about study cases and various model of disaster diplomacy.

Second, document studies also are gained by online through media, namely internet. There are some document reviews such as publication from center or state, namely *Malaysia: Disaster Management Reference Handbook*. This publication assists the researcher to find the information about the occurred disaster in Malaysia and some policies and steps in handling the disaster in Malaysia. There is a journal that is written by Ratih Herningtyas and Surwandono, *Bencana Alam sebagai Sarana Meningkatkan Kerjasama Internasional*. In addition, there are some documents that are utilized by researcher to analyze the rising of disaster in the world, especially in Malaysia, such as: Publications or reports from several association related to banks in the form of e-book that is written by Asian Development Bank, *The Rise*

*of Natural Disasters in Asia and the Pacific*; Report from international bodies, namely IFCR that is titled *World Disasters Report 2014 – Data*; The branch organization, namely UNISDR that provide the document with the title, *Malaysia: Disaster and Risk Profil*; and so forth.

#### **4. Sources of Data**

According to Gani and Amalia, data, which is based on the source, is classified into two types, namely primary and secondary data, in which the primary data is the one which is obtained from the first source, whereas the data which is not gained from the first source is called as the secondary data (Gani & Amalia, 2015). Primary data is the data that is obtained by researcher directly without intermediaries. The data usually is collected by institutions or individuals through a survey. While secondary data is one which is collected and analyzed by the previous researcher before someone else uses it (Bhattacharyya, 2006). Hence, it actually is considered as a primary data for the previous researcher but after the data is processed then it becomes the secondary data for others (Sarwono, 2006). This research, that observes about the disaster diplomacy of Malaysia as an instrument to enhance international cooperation, selects the secondary data, in which its research comes from data sources that have processed or analyzed by the previous researchers, such as Ilan Kelman, Surwandono, Ratih Herningtyas, and other researchers from several associations or organizations (UNISDR, ADB, ADRC, IFCR, etc).

#### **5. Object of Research**

The object of research in this research focuses on the understanding toward the behavior of the actor in study case about the disaster diplomacy of Malaysia as an instrument to enhance international cooperation.

## **G. Scope of Research**

In order to create clear and focus research, this undergraduate thesis assigns the limitation on the mechanisms of disaster management in Malaysia that will be able to trigger the international cooperation with other states. However, the mechanisms of the Malaysian government in handling the disaster that occurs within the state are not become the main case in this thesis analysis.

## **H. Organization of Writing**

In order to create understandable analysis, the system of writing is really important. This thesis provides analysis in systematic order by separating the analysis into several chapters. Every single chapter is a coherent body of analysis in order to answer the question that is generated before. These would be as follows:

### **1. Chapter I**

The first chapter consists of eight sub-titles: background, research question, theoretical framework, hypothesis, the purpose of research, the method of research, the scope of research, and organization of writing. The background is the status quo that generates the problems. Question research is the problem analyzed in this thesis. The theoretical framework is the explanation of theory to find the answer to the question. The hypothesis is the answer that the thesis wants to prove. The purpose of research is the goals that want to be achieved by the researcher. The method of research consists of the explanation about how the writer collects the data and sources to generate the answer. The next part is the scope of research where the focus of analysis is set. The last is the organization of writing that shows the order of the analysis written in this thesis.

### **2. Chapter II**

This chapter explains about the description of governmental system in Malaysia and decision-making process of Malaysia related to the disaster.

### **3. Chapter III**

This chapter explains about the disaster issue of Malaysia and how it gives the effect for Malaysia, especially in the aspect of economy, psychology, politic, and health.

### **4. Chapter IV**

This chapter describes complex adaptive system as disaster diplomacy in Malaysia.

### **5. Chapter V**

This is the last chapter of this thesis, in which consists of the overall conclusion of this research. The conclusion consists of the summary of all explanation generated in the previous chapters. Hence, this chapter concludes the disaster diplomacy of Malaysia as an instrument to enhance international cooperation.