

CHAPTER IV

COMPLEX ADAPTIVE SYSTEM AS DISASTER DIPLOMACY IN MALAYSIA

In the previous chapter, it has been explained that Malaysia encountered several disasters that are not only caused by natural disasters but also man-made disasters so that these will give the adverse impacts for the state, such as fatalities, environmental damage, the destruction of facilities and infrastructure, economic losses and so forth. Moreover, there are some aspects in Malaysia that have affected by the disasters, such as psychological aspect, health aspect, economic aspect, and political aspect. Hence, the disasters have become new problems for Malaysia nowadays.

As the condition that has been illustrated above, this chapter explains the management of Malaysian government in facing the occurrence of the disaster so that the disasters do not only give the negative effects but also give an opportunity for the government to gain the positive effects from the incident of disaster in Malaysia, especially in term of the enhancement of its international cooperation.

The disaster management is a method that is implemented by the Malaysian government to encounter the occurrence of the disaster within the state so the impact of the disaster can give the beneficial effect for Malaysian state, in which it will not only reduce the disaster risk but also enhance its international relations. The disaster management in Malaysia has a system that indirectly can lead to the enhancement of its international cooperation. The system is a part of disaster diplomacy that is used by Malaysia and it is called as Complex Adaptive System (CAS).

The Complex Adaptive System (CAS) is the system that can utilize the impact of Malaysia disaster to be an opportunity in conducting the international cooperation with

other states that have similarity in the experience and potency of the disaster. Therefore, Malaysia usually will conduct the cooperation in term of the data exchange, the disaster research, the Disaster Risk Reduction (DRR) cooperation, giving the assistance, and it will build other cooperation that can give other profits for Malaysia. Nonetheless, there are two of three mechanisms in CAS that are implemented in Malaysia, namely mechanism of tagging and mechanism of building block.

A. Mechanism of Tagging

Mechanism of Tagging in the Complex Adaptive System that is implemented by Malaysia, is the mechanism that facilitates the matching process between units needing assistance and the units providing assistance in the disaster management, as well as in the international cooperation, Malaysia will also conduct some agreements with other states, or other international organizations and institutions that have mutual interests, services, and tradable commodities. In addition, it is contained within the NSC Directive No. 20 that is related to National Policy and Mechanism on National Disaster Relief and Management on the Land.

The mechanism of disaster management through this directive will determine the suitability among the Malaysian government agencies as units that will give the assistance and the units that need the assistance, namely the communities that are affected by the disaster, in which it depends on the coverage of the impacted area, as well as the scale and characteristics of the disaster. Hence, the disaster management of Malaysia in this mechanism is divided into 3 levels (Center for Excellence in Disaster Management & Humanitarian Assistance, 2016).

In level 1, this is the disaster management that is held by the District Committee because the disaster in this level is classified as a local disaster (Center for Excellence in Disaster Management & Humanitarian Assistance, 2016) or the incident of natural disasters, such as landslide, flood, beach erosion, and mudslide (Islam, Kamaruddin, Ahmad, Jan, & Anuar, 2016), in which it still can be controlled and does not spread to other

areas. Hence, the District Committee has a role to ensure the coordinated action in the management of disaster on the local level, especially in providing the assistance to the availability of human resource and assets because the disaster has given the impact to the local community (Center for Excellence in Disaster Management & Humanitarian Assistance, 2016).

Furthermore, the disaster management in level 2 is controlled by the State Committee because the disaster in this level is categorized as a serious disaster (Center for Excellence in Disaster Management & Humanitarian Assistance, 2016), such as the human-made disaster in the form of accident, pollution, and an explosion (Islam, Kamaruddin, Ahmad, Jan, & Anuar, 2016), in which it can escalate to other areas and it usually impacts two districts in Malaysia. Accordingly, it will be a responsibility of the State Committee to give the assistance for the District in term of providing human resources as need, financial aids, and other additional assistance because the disaster has already affected the communities in two districts of Malaysia (Center for Excellence in Disaster Management & Humanitarian Assistance, 2016).

The disaster management of Malaysia in level 3 is handled by Federation Committee. It occurs because the disaster that happens at this level is classified as the complex disaster, in which the disaster has affected the areas in two or more states. In this case, the local authorities have failed in managing the occurred disasters. Hence, the Malaysian government gives the responsibility to Federal Committee in order to handle the disaster by determining the policy of the national disaster management and providing financial aid and human resource because the disaster has given impact to the wider communities in two or more state (Center for Excellence in Disaster Management & Humanitarian Assistance, 2016). The Malaysian government further can determine to propose the foreign assistance or not (Islam, Kamaruddin, Ahmad, Jan, & Anuar, 2016).

Therefore, the disaster management in the level 3 usually will be able to trigger the international cooperation,

where the government will utilize the disaster that occurs in Malaysia to obtain the international assistance, either from other states or other international institution and organization.

In the disaster management of Malaysia, international assistance is proposed by Prime Minister that is based on the advice from the National Security Council (NSC) if the Malaysian government cannot handle the disaster in the large-scale within the state. Furthermore, Malaysia will make cooperation with ASEAN states and states who have some agreements with Malaysia as the main priority in asking the international assistance. It occurs because Malaysia is one of the ASEAN member states, in which they are located in same region, namely in the South East Asia so that it also will be a regional issue if the disaster has impacted to two or more than states in the South East Asian region. While, the agreements that have conducted by Malaysia and other states have created the fundamental cooperation between both of them so that Malaysia has a relation with those states. Moreover, the request to get the international assistance from other states will be subject to the required resource and the specification of unmet need. Nonetheless, Malaysia will not ask the international assistance during there are some free donations and assistance from others (Australian Civil-Military Center; Humanitarian Advisory Group, 2015).

The disaster management of Malaysia that is based on the NSC Directive No. 20 does not have any clear provisions in term of the policy and process of the receipt, as well as processing and coordination of international assistance. Nonetheless, Malaysia holds the principle of non-interference and sovereignty related to the international assistance. In addition, Malaysia will make sure that the international assistance will not inconvenience the donor state (Australian Civil-Military Center; Humanitarian Advisory Group, 2015).

Therefore, the mechanism of tagging in handling the disaster in Malaysia has assisted the government to divide the disaster management into 3 levels, where there are the differences of responsibilities in each of levels so that the

disaster management is more structured and can reach the disaster at the lowest level. Moreover, in this mechanism, Malaysia indirectly can enhance its interantional cooperation with other states or other international institutions or organizations.

In addition, the mechanism of tagging also can assist Malaysian in the management at the scene of disaster based on zone, in which the mechanism tagging in this management attempts to match the expertise of rescue units with the location of incident. Hence, based on NSC Directive No. 20 in the article 25, the disaster management of Malaysia will divide the agencies or voluntary bodies as the units of rescue into 3 categories, among others:

1. The main agencies of rescue such as Royal Malaysia Police (PDRM), Special Malaysia Disaster Assistance and Rescue Team (SMART), Emergency Medical Department, Malaysian Armed Forces (ATM), Malaysian Fire and Rescue Department (JBPM), and other special teams that are built by agencies with the certain proficiency or capability to conduct the works with the main rescue force.
2. Supporting agencies of rescue such as Civil Defense Department and other special teams that are formed by some agencies to help on the operation of search and rescue.
3. Agencies of relief and recovery such as Social Welfare Department, Civil Defence Department, Malaysian People Voluntary Alliance (RELA), Public Works Department (JKR), St. John Ambulance, Malaysian Red Crescent Society (PBSM), Malaysia National Telecommunication Agency (STMB) and other agencies or voluntary bodies (National Security Council).

Furthermore, the disaster management of Malaysia that uses the tagging mechanism has also facilitated the matching process among those agencies and the locations that are affected by the disaster. Hence, based on NSC Directive No. 20 in the

article 26, the location of incident is divided into 3 zones, namely Red Zone, Yellow Zone, and Green Zone.

1. Red Zone is an area surrounding the actual spot of incident. It is a special region for the main teams of rescue that have certain proficiencies and special units from JBPM, SMART, Emergency Medical Department, ATM and other special teams that are established by agencies with special expertise on their works so that they will work together and assist the main teams of rescue.
2. Yellow Zone is an area surrounding the Red Zone. It is subjected the place the Control Post on Scene and posts for any main rescue agencies, such as PDRM, SMART, ATM, JBPM, and Emergency Medical Department and other teams that are built by agencies with special expertises to do their duty hand in hand and helping main rescue team and supporting rescue team such as Civil Defense Department.
3. Green Zone is an area surrounding the Yellow Zone. It is aimed to place the agencies of relief and recovery and other voluntary bodies. There are Social Welfare Department, Public Works Department (JKR), Malaysian National telecommunications Agency (STMB), Malaysia Electrical Power Agency (TNB), Malaysia Red Crescent Society (PBSM), Malaysian People Voluntary Alliance (RELA), St. John Ambulance and other relevant agencies and voluntaries bodies. It also put the Center of Victim Family, the Center of Media Management, the Center of Counselling and Store of Food and Morgue.

Each distance of zones is determined by the Commander of Disaster Operation, in which it depends on the level of disaster. He also roles to make a decision on which and how many rescue and relief units that are needed to assist in the operation of search and rescue at the concerning zones (National Security Council).

B. Mechanism of Building Block

Mechanism of building block in the disaster management of Malaysia is a number of actions to enhance its international cooperation under the procedure or framework of the repeated interaction in handling the disaster between Malaysia and other states, international organizations, or international institutions in the form of MoU (Memorandum of Understanding). In addition, building block mechanism in the form of MoU has a function to indicate the intended action between Malaysia and other parties so that it will give clear explanations about the intentions, obligations or duties that are owned by the involved stakeholders in managing the disaster. In this mechanism, Malaysia will reinforce its cooperation with other parties that are involved under the MoU even though it is not legally bound. Moreover, Malaysia in requiring the international assistance will also prioritize the states that have conducted Memorandum of Understanding (MoU) so that indirectly it will be able to enhance the international cooperation of Malaysia.

Malaysia has signed some Memorandums of Understanding (MoU) with some states, international organizations, or international institutions that are relates to the assistance and coordination of the disaster, among others:

1. Memorandum of Understanding (MoU) between Malaysia and Indonesia

On 11 December 1997, Memorandum of Understanding (MoU) on Disaster Cooperation and Assistance between Malaysia and Indonesia was signed. This international cooperation was established in order to handle and manage any kinds of disaster that perhaps occurs in the future. In this MoU, it was signed by the Committee Chairman of the National Disaster Management and Relief, the Coordinating Minister for People's Welfare, and the Minister of Information in the name of Malaysian government. Meanwhile, in the name of Indonesia, MoU was signed by the chairman of the Indonesia National Disaster

Management Coordinating Board (Center for Excellence in Disaster Management & Humanitarian Assistance, 2016).

There are some agreements between Malaysia and Indonesia on Disaster Coordination and Assistance within this MoU, as listed below:

- a) Reciprocity of information or expertise about the newest technology to be used in term of teledetection, response, disaster risk reduction, prevention, mitigation, rehabilitation, and recovery.
- b) Workouts of personnel and officer in the aeromobility emergency concept, the management of the disaster, and the techniques of rescue and search either in sea or land.
- c) Sharing of experience through the publication on the management of the disaster, conference, and seminar.
- d) Cooperation on the studies of public health for the effect of certain disasters (Center for Excellence in Disaster Management & Humanitarian Assistance, 2016).

2. Memorandum of Understanding (MoU) between Malaysia and Republic of French

Malaysia also makes agreement on Co-operation for Public Safety, Management and Prevention of Disaster with the Republic of French, in which the contents of agreement are:

- a) Sharing the public health experiences, such as hazards of environment, industry, and chemical.
- b) Exchanging the informations about every of laws and regulations each other related to hazard and the pollution of environment.
- c) Exchanging scientific informations and technologies related to the disaster of technology, man-made, and natural through publication, forum, and electronic media.

- d) Providing specialists participation from one party in the training program of the relevant national technical with other parties (Center for Excellence in Disaster Management & Humanitarian Assistance, 2016).

In 2015, Malaysia signed the Memorandum of Understanding with Singapore, in which actually it was a renewal of MoU on disaster management cooperation between Malaysia and Singapore that firstly was conducted in 1993. Furthermore, in this MoU, Malaysia and Singapore wanted to add the ferry services between the countries. Moreover, this cooperation has increased to other cooperations, in which the highest agenda after the signment of MoU, there is the proposed high-speed rail link between Singapore and Kuala Lumpur (Chang, 2015). As a result, in the mechanism of building block, Malaysian government has capacity to strengthen its cooperation by building MoU among other states, international institutions, or international organizations. They further can increase the previous cooperation or create new cooperation with those parties that has ever involved before.

Therefore, the Complex Adaptive System (CAS) through two mechanisms, namely tagging and building block in the disaster management of Malaysia indirectly has enhanced the international cooperation between Malaysia and other parties. In the tagging mechanism, it can assist the Malaysian government in the distribution of the disaster management structure in Malaysia and indirectly it also can trigger the international cooperation between Malaysia and other parties when the local authorities has failed in handling the impact of the disaster so that Malaysia will ask the international cooperation from other states but they are more prioritized the ASEAN states that usually tend to have mutual interest as ASEAN member states that are located in the same region as well as tend to have the mutual service and tradable

commodities. Moreover, Malaysia will also seek the international relation from the states that have conducted some agreement with Malaysia so that Malaysia can enhance the previous cooperation with other parties. In the building block mechanism, the Malaysian government attempts to strengthen and enhance cooperation by creating the number of actions under the framework or procedure of repeated interaction among Malaysia and other states in term of technique, training, and sharing the information related to the management of the disaster.