

An Overview of the Participation of Community and Faith-Based Organisations (FBO) in Disaster Preparedness in Malaysia

Azrina Sobian
azrina@ikim.gov.my

Abstract

Malaysia has experienced various types of disasters in the last 50 years. Besides natural disasters such as floods (monsoonal and flash floods), landslides, mudslides, earthquakes (especially in Sabah) and tsunami, Malaysia has also experienced man-made disasters such as fires and explosions, vehicle accidents, haze including transboundary haze and others. In almost all episodes of the disasters, the government has played a major role, starting from the formulation of the policy on disasters, disaster preparedness, rescue and relief efforts, and redevelopment of the affected areas. It is vital for the public to participate in each cycle of disaster management (pre-disaster, during disaster and post-disaster). The absence of support and understanding of local community towards disaster risk and preparedness could ruin disaster management risk reduction efforts. In many instances, the role of local communities in Malaysia's disaster preparedness is somewhat invisible. Thus, the community should be empowered to deal and prepare for disasters to ensure the overall effectiveness of disaster management in Malaysia. In Malaysia's context, the strength of the faith-based organisations (FBO) should also be utilised in disaster preparedness efforts. This literature review or secondary source-based article examines

the current situation in disaster preparedness among Malaysian communities and discusses the challenges that lie ahead in shaping the culture of preparedness in the communities. In conclusion, Malaysia community disaster preparedness needs to be improved. The communities (including FBO), directly or indirectly affected by disasters, should also be empowered to prepare for disaster.

Keywords

Public participation; disaster relief; faith-based organisation; local knowledge; community support.

Introduction

On 5 June 2015, a 5.9-magnitude earthquake struck Sabah, triggering landslides and avalanches of rocks and boulders. The disaster claimed 18 lives and damaged many important infrastructures in the West of Sabah, covering areas like Ranau, Tambunan, Tuaran and Kota Belud.¹ A report by the Public Works Department Malaysia on the earthquake, stated that 61 buildings were damaged, that included mosques, schools, hospitals and police headquarters with an estimated loss of RM94.8 million.²

One of the important characteristics of Sabah's earthquake is the role of mountain guides in the search and rescue (SAR) operations. Their expertise is needed as they are very familiar with the area. This shows that local knowledge is vital in SAR operations. In addition, the issues of disaster preparedness were given due attention in the wake of the earthquake. Among the issues raised included untrained SAR teams in mountainous disaster areas, unpreparedness of the authorities to deal with such emergencies, weaknesses of the warning systems and buildings that were not earthquake-resistant.

In addition to earthquakes, Malaysia also has experienced other types of natural disasters such as floods, mudslides,

-
1. Julia Chan, Sabah's West Coast rocked by 6.0 magnitude earthquake, *The Malay Mail Online* 5 June 2015 <http://www.themalaymailonline.com/malaysia/article/sabahs-west-coast-rocked-by-6.0-magnitude-earthquake>, accessed on 30 November 2015, 11.15 a.m.
 2. *The New Straits Times Online*, Disaster preparedness, 8 June 2015, <http://www.nst.com.my/news/2015/09/disaster-preparedness> accessed on 30 November 2015, 11.00 a.m.

landslides and tsunamis. Besides natural disasters, the country also has experienced man-made disasters such as fires and explosions, building collapses, as well as road and railway accidents. Nevertheless, Malaysia can be regarded as a fortunate country (particularly, Peninsular Malaysia) as it is not vulnerable to major natural disasters such as earthquakes and hurricanes. However, Malaysia is exposed to other types of catastrophes such as floods, droughts and haze. An overview of major disasters that have occurred in Malaysia since 1968 is given in Table 1.

A key feature of disaster management in Malaysia is the emphasis on the role of the government. Previously, the National Security Council (NSC) had played an important role in the management of disasters in Malaysia. The NSC was responsible for the coordination of the national disaster management and ensured that all policies and management mechanisms of the national disaster management were implemented at all levels of disaster management based on Directive No. 20 of NSC.³

However, from 1 October 2015, the management of disasters in Malaysia is now under the jurisdiction of the National Disaster Management Agency (NADMA). NADMA's role is to carry out disaster preparedness, SAR operations and relief efforts effectively. The formation of NADMA is through the amalgamation of three entities namely, (1) Disaster Management Division of NSC; (2) Post Flood Recovery Unit; and (3) Special Malaysian Response Team (SMART). All the activities related to managing disasters are now under one roof.

Table 1: List of Notable Disasters in Malaysia⁴

DATE	DISASTER	CASUALTY
19 Oct. 1968	Collapse of 4-Storey Building, Kuala Lumpur.	7 dead, 11 injured
Jan. 1971	Monsoon flood spilled over to West Coast of West Malaysia.	24 Dead, National Emergency Declared

3. Badrudin, A.R., 2012. Issues of Disaster Management Preparedness: A Case Study of Directive 20 of National Security Council Malaysia. *International Journal of Business and Social Science*. Vol. 3, No.5, pp. 85-86.
4. Reproduced from Aini Mat Said and Fakhrul-Razi Ahmadun, *Disaster Management in Malaysia: Evolution, Development and Future Challenges*, Jurutera, February 2007, pp. 11.

31 Jul. 1988	Collapse of Sultan Abdul Halim Jetty, Butterworth, Penang.	32 Dead, 1,674 injured
22 Sept. 1989	Fire at Sekolah Agama Rakyat Taufiqiah Khairiah Al Halimiah, Yan, Kedah.	27 Dead, 6 injured
7 May 1991	Fire and Explosion of Bright Sparklers Fireworks Factory, Sungai Buloh, Selangor.	22 Dead, 103 injured
5 Apr. 1992	Fire at Sultan Abdul Aziz Shah International Airport, Subang, Selangor.	3 Dead
20 Jun. 1992	Choon Hong III Ship, Explosion and Fire, Port Klang.	10 Dead
11 Dec. 1993	Collapse of Highland Towers Condominium, Hulu Klang, Selangor.	48 Dead
4-7 Dec. 1994	Landslides in Cameron Highlands.	7 Dead
30 Jun. 1995	Landslides, Off Genting Highlands Road, Pahang.	20 Dead, 22 injured
15 Jul. 1996	Tourist Bus Accident, landslide at KM15, Genting Highlands, Pahang.	17 Dead
29 Aug. 1996	Mudslide at the Aborigines' Village in Pos Dipang, Kampar, Perak.	44 Dead, 30 Homes destroyed
26 Dec. 1996	Tropical Storm "Greg" (Typhoon), Keningau, West Coast of Sabah.	230 Dead, 4,925 Homes destroyed
1-30 Apr. 1997	Enteroviral Outbreak, Sibu, Sarawak.	25 Dead
Jul.- Oct. 1997	Country-wide Haze in Malaysia and Haze Emergency in Sarawak.	Environmental damage, Health problems and Economic losses
24 Dec. 1997	Fire and Explosion, Shell SMDS, Bintulu, Sarawak.	12 Minor injuries, Extensive property damage and losses

Disaster Preparedness in Malaysia

Feb.-May1998	Forest and Peat Fires throughout the Country.	3,000hectares of forest burnt
March-Sept. 1998	Water Supply Crisis in the Klang Valley.	1.8million residents affected
4 Feb. 1999	Kg. Gelam Landslides.	17 dead
Oct. 1998- Jun. 1999	Japanese Encephalitis (JE) Outbreak in Perak, Negeri Sembilan and Melaka.	101 dead, 190,965 pigs culled
28 Jan. 2002	Ruan Changkul Simunjan, Sarawak Landslide.	16 dead
26 Dec. 2004	Tsunami (States of Penang, Kedah and Perlis).	68 dead, 276 injured

One of NADMA’s roles is to promote community awareness. The component outlines the aim at developing a national approach in fostering and enhancing community awareness of risks, and encourage involvement in prevention, mitigation, preparedness, responses and recovery strategy.⁵ Disaster education and awareness in Malaysia is being implemented through campaigns, special talks or programmes with disaster affected communities, dissemination of information in various media such as the newspaper, television, radio, the social media and websites by both government agencies and non-governmental organisations (NGOs).

Any effort towards disaster preparedness will never succeed without the support and involvement of the community. Thus, it is imperative to prepare the community for any disaster event. However, several questions arise, i.e., does the community know the need to prepare for any disaster events, do they know the “why,” “what,” and “how” to prepare, are they aware of the risks associated with disaster and does the community realise their responsibility towards disaster preparedness?

5. Dorasamy, M. *et al.*, 2010. Disaster Preparedness in Malaysia: An Exploratory Study. *WSEAS Transaction on Information Science and Application*, Vol. 7, Issue 5, May 2010, pp. 22, accessed at <http://www.wseas.us/e-library/transactions/information/2010/89-614.pdf> on 7 December 2015, 10.26 a.m.

This article discusses community disaster preparedness in Malaysia. The discussions will focus on the role of the community in disaster preparedness and the empowerment of community disaster preparedness. This article has been prepared based on secondary sources such as working papers, journals and others such as newspapers and websites.

Disaster management study, particularly on community participation and response to disaster, is relatively new in Malaysia. Therefore, an overview study such as this one will provide information on the extent of public participation and engagement in disaster management in Malaysia. Such a study also gives valuable information on the way forward to enhance the role of the public in disaster management.

Community Disaster Preparedness and International Guidelines

There are several international guidelines for engaging the community in disaster risk reduction. The two most important documents⁶ related to public participation in disaster risk reduction (DRR) are the Hyogo Framework for Action 2005-2015 (HFA) and Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR). Both documents recognise the role of the community in DRR.

HFA was adopted at the World Conference on Disaster Reduction, Kobe, Hyogo, Japan from 18-20 January 2005. It outlines the foundation for the promotion, enhancement and improvement of community participation in DRR and emphasises on the proactive approach to inform, motivate and involve communities in DRR.

DRR must be systematically integrated in all policies, plans and programmes including policies related to sustainable development and should be carried out through cooperation

6. Prior to the two documents, there are several other international multilateral agreements on DRR as listed in Annex, UNISDR (United Nations International Strategy for Disaster Reduction). 2005. *Hyogo Framework for Action 2005–2015: Building the Resilience of Nations and Communities to Disasters*. Geneva: UNISDR, pp. 20-23, available at <http://www.unisdr.org/we/intr/intergov/official-doc/L-docs/Hyogo-framework-for-actionenglish.pdf>, accessed on 9 April 2016, 12:28 p.m.

and, regional and international partnerships. HFA outlines five priorities for action; (i) to ensure that DRR is a national and a local priority with a strong institutional basis for implementation, (ii) to identify, assess and monitor disaster risks and enhance early warning, (iii) to use knowledge, innovation and education to build a culture of safety and resilience at all levels, (iv) to reduce the underlying risk factors, and (v) to strengthen disaster preparedness for effective response at all levels. Based on the five priorities, various activities can be carried out with active participation of local communities.

In general, HFA does not only account on the role of society in DRR, but also focus on the setting up of various foundations for society to actively participate in any DRR programmes. The framework states at least four important points, which are: (i) community participation, (ii) information management and exchange, (iii) education and training, and (iv) public awareness.

In terms of community participation, HFA states that “adoption of specific policies, the promotion of networking, the strategic management of volunteer resources, the attribution of roles and responsibilities, and the delegation and provision of the necessary authority and resources”⁷ should be given due attention. Interestingly, the need to have specific policies raises the question whether Malaysia has had comprehensive policies on DRR.

In Malaysia, the Standard Operating Procedure (SOP) for the management of disaster is the National Security Council Directive 20 (NSC 20). The document provides a policy guideline on disaster management and was developed in 1997.⁸ It generally states the role and responsibilities of various agencies, at district, state and national levels, in disaster management. However, the directive does not point out clearly the involvement of the public in disaster management. The lack should be addressed as the frequency and intensity of disasters, particularly natural disasters, has been increasing since 1997. Thus, it is timely for Malaysia to develop a comprehensive DRR policy—that covers all aspects of DRR, including education, dissemination of information and post-disaster development.

7. UNISDR, 2005, pp. 7.

8. Badrudin, 2012, pp. 87.

In terms of information management and exchange, HFA states that it is important to “provide easily understandable information on disaster risks and protection options, especially to citizens in high-risk areas, to encourage and enable people to take action to reduce risks and build resilience.”⁹ This means that knowledge is important in the DRR programme. With knowledge, society could understand better the risks related to disasters and encourage them take appropriate action to reduce the risks.

In Malaysia, information on disaster to information that helps the public to prevent, deal or manage their wellbeing when a disaster occurs is often conveyed through television, radio, print media such as the newspapers and the social media. For example, information related to how to manage oneself during flood or how to take care of one’s health when haze occurs. Besides such “feed-in” information, Malaysia would benefit more by embarking on the hands-on experience method of learning to enhance society’s knowledge of DRR.

Education and training are also essential in enhancing disaster preparedness and understanding of DRR. HFA states that, to “promote community-based training initiatives,” it is vital to consider the role of volunteers. The ultimate goal of such an action is “to enhance local capacities to mitigate and cope with disasters.”¹⁰ Empowering communities in DRR is crucial. Members of the public become not only victims, but also important agents in any risk reduction effort. Therefore, education and training are vital. Some countries in fact have conducted various training programmes that empower communities to act in disaster situations.

For example, the University of Kagawa conducted a joint-training and disaster-based skills upgrading programme by engaging the community in preparation of flood and tsunami-based disasters. There are several learning centres in Japan, such as the Honjo Life Safety Learning Center, Tokyo and the Kyoto City Disaster Prevention Center, that serve as learning centres for DRR. Both centres provide disaster-related information and advice, as well as conduct trainings, including disaster survival

9. UNISDR, 2005, pp. 9.

10. UNISDR, 2005, pp. 10.

skills training, and opportunity to experience real-life disaster situation as part of community disaster preparedness.¹¹ In some other places, for example Los Angeles and San Francisco, the community itself develops multiple disaster risk reduction training programmes. In the programmes, citizens acquire hands-on experience in fire suppression, search and rescue, damage assessment, incident management, disaster medical aid, disaster mental health and emergency communication.¹²

HFA also addresses public awareness issues. Under this item, the role of the media is given profound attention. It states that any disaster risk reduction initiatives should “promote the engagement of the media in order to stimulate a culture of disaster resilience and strong community involvement in sustained public education campaigns and public consultations at all levels of society.”¹³ Besides educating the public on disasters, the media will also be responsible in conveying correct information on any catastrophic events. Thus, the engagement of the media in DRR is vital.

The HFA only discusses general requirements in any DRR initiatives, especially to countries that have adopted the HFA. The countries need to prepare a progress report on their respective DRR initiatives. Based on the National Progress Report on the Implementation of the HFA (2011-2013) (Interim), Malaysia had achieved moderate progress in the implementation of the HFA.

In terms of policy development, Malaysia relies on NSC 20 as a policy for DRR and needs “a national legislation for disaster management, which is expected to significantly emphasize DRR.”¹⁴ Yet, in terms of public engagement in DRR, the level

11. The information was obtained from the author’s field research trip to Kagawa, Sendai, Hiroshima and Kyoto from 17-22 December 2015 in conjunction with the International Workshop on “Toward Building Regional Platform for Disaster Risk Reduction in Asia” (14-16 December 2015). The programme was organised under the JSPS Core to Core Program, Regional Platform for Disaster Risk Reduction in Asia with Networking Researchers, Practitioners and Information.

12. Lichtenman, 2000, pp. 264.

13. UNISDR, 2005, pp. 10.

14. UNISDR (United Nations International Strategy for Disaster Reduction), 2013, Implementation of the Hyogo Framework for Action - Summary of Reports 2007-2013, Geneva: UNISDR, accessed at http://www.unisdr.org/files/32916_implementationofthehyogoframeworkfo.pdf on 10 June 2016, 11.17 a.m.

of engagement is rather low and it is only based on volunteerism efforts.¹⁵ The report shows that there is a pool of volunteers from different organisations offering their assistance as on-the-ground volunteers, providing counselling and donation, participating in awareness programmes and reconstruction of disaster affected areas.¹⁶ The report also shows that limitation in “budget, time, human, capacity and tools”¹⁷ limits the level of public participation in DRR. However, the government of Malaysia has been organising several awareness programmes on DRR such as the National Disaster Awareness Day held annually on 26 December. In the effort to raise awareness of disasters in schools, the government has also set up the Safe School Programmes. While efforts in inculcating disaster preparedness have resulted in the government establishing several funds to help disaster victims such as the Poor Student’s Fund and the National Disaster Relief Fund in 2006.¹⁸

The latest UN document on DRR is the Sendai Framework for DRR 2015-2030 (SFDRR). The document was adopted at the Third United Nations World Conference on DRR, held from 14-18 March 2015 in Sendai, Miyagi, Japan.¹⁹ The document is an extension of the HFA, which concluded in 2015.

Compared to HFA, SFDRR discusses in detail the requirements for DRR. The document not only has clearer objectives to be achieved in the DRR efforts, but also has well-defined targets. There are seven targets in SFDRR. Amongst the targets are to reduce substantially the global disaster mortality by 2030, to lower the average global mortality between 2020-2030 compared to 2005-2015, and to substantially reduce the number of affected people globally by aiming to lower the average global figure between 2020-2030 compared to 2005-

15. Besides volunteerism, the public should also participate in multiple efforts of DRR, such as policy formulation, disaster or emergency preparedness programmes, relief, response, and recovery, and education and awareness.

16. UNISDR, 2013, pp. 10.

17. UNISDR, 2013, pp. 11.

18. UNISDR, 2013, pp. 6.

19. UNISDR (United Nations International Strategy for Disaster Reduction), 2015. *Sendai Framework for Disaster Risk Reduction 2015–2030*. Geneva: UNISDR, available at http://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf, accessed on 8 Jun. 2016, 1.10 p.m.

2015.²⁰ Such well-defined targets should be a guide for countries which adopt SFDRR to set their own targets for their national DRR programme.

In addition to well-defined targets, SFDRR also listed four priorities for action, namely: (i) understanding disaster risks; (ii) strengthening disaster risk governance to manage disaster risks; (iii) investing in disaster risk reduction for resilience, and (iv) enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.²¹ Although all priorities for action are related to disaster preparedness, priorities for action number four, specifically focuses on disaster preparedness for DRR. To achieve priorities for action number four, measures need to be taken at the local, national, regional or global levels.

At the national and local levels, 16 proposed priorities for actions can be implemented to ensure all plans for disaster preparedness can be achieved successfully. Among the priorities for action are: to prepare or review policy, plans and programmes related to disaster preparedness; to invest in forecasting and early warning system; to increase resilience for existing and new infrastructures; to establish community centres specifically for public awareness; to enhance the role of public service workers, focusing on training of volunteers and promoting regular training for disaster preparedness, response and recovery; to encourage cooperation of all parties or stakeholders and establish contacts for relief, rehabilitation and development efforts; to promote the incorporation of disaster risk management into post-discovery, rehabilitation process and disaster reconstruction programme; to consider the relocation of public facilities in disaster prone areas; strengthening of the capacity of local authorities; to ensure the requirements for registration or database of deaths due to disasters; to enhance recovery scheme for psychosocial support and mental health services; and to review and strengthen national laws and procedures on international cooperation.²²

At the global and regional levels, the emphasis is on the cooperation of the countries involved. The focus of cooperation is in the coordinated action toward disaster response, development

20. UNISDR, 2015, pp. 12.

21. UNISDR, 2015, pp. 14.

22. UNISDR, 2015, pp. 21.

and dissemination of instruments such as standards, codes, operational guides etc., development and investment in early warning systems, raising public awareness, regional cooperation in disaster preparedness and sharing of response capacities, resources and training existing workforce and volunteers in disaster response.

Each country that adopts SFDRR needs to consider all proposed activities under each priority for action and implement it according to the needs and capabilities of the country. Just as HFA, each of the countries involved also needs to provide progress reports on the implementation of SFDRR. Since SFDRR was only established in late 2015, the countries' progress of implementation of SFDRR has yet to be available.

Based on the proposed activities under HFA and SFDRR, the important agenda for Malaysia is to review the existing policy on DRR and/or to create a new national policy related to disaster risk reduction. At this point, the DRR policy in Malaysia is highly dependent on the NSC 20. The directive was established in 1997 and should be reviewed to include new issues or challenges in DRR as well as the transformation in the national disaster management. The Malaysian government should also consider various proposed activities under HFA and SFDRR as current issues and efforts of DRR are expanding rapidly in parallel with the development of types and intensity of disaster.

However, until the reassessment of all relevant policies on DRR in Malaysia are completed or the new policy on DRR established, all efforts to deal with disaster events should proceed as usual in accordance with NSC 20. The lack of updated and a comprehensive policy does not hinder existing efforts of disaster risk management. The reviewed policy or the new one should later be synergised with other national development policies to ensure smooth implementation of relief, rehabilitation and post-disaster development efforts.

Understanding Community and Disaster Preparedness

To understand the community's role in disaster preparedness, we must also understand the term, 'community and disaster preparedness'. A community can be defined in different ways

such as a place of living, a common interest and attitude or a social grouping basis. Sutton and Tierney²³ defined community as a social unit that may or may not be contiguous with a local jurisdiction; the boundaries of a community may be presented by neighbourhoods with common ethnicity, interest-based association or other social groups.

Thus, in Malaysia's context, a *kariah masjid* (a group of people who share or live around the mosque area), people living in a village, members of fishermen associations, residents' associations and religious-based organisations, can be regarded as a community. Such units of community have their own activities, know each other and ready to assist its members in any distressed situation. Such a characteristic should be utilised for disaster preparedness.

Under NSC 20, 'disaster' is defined as a sudden event, very complex in nature and causing fatality, loss of properties or the environment and causing morbidity to the local society. NSC 20 is the lead document for disaster management in Malaysia. It provides a policy guideline on disaster management and rescue on land in accordance to disaster level. It also provides the roles and responsibilities of different agencies in disaster management.²⁴

Under NSC 20, there is a clear distribution of the roles and responsibilities of the federal and state governments in the management of disasters, including relief and rehabilitation operation. However, NSC 20 does not state anything on the role of community in disaster management. It merely states that the National Disaster Management and Relief Committee (NDMRC), is responsible for formulating educational and early preventive programmes for the public in coping with disasters.²⁵

The NSC 20 does not highlight the need of active participation of the community in disaster management. Besides

23. Sutton, J. and K. Tierney, 2006. *Disaster Preparedness: Concepts, Guidance and Research*. Boulder: University of Colorado Natural Hazards Center, Institute of Behavioral Science, available at <http://www.fritzinstitute.org/pdfs/whitepaper/disasterpreparedness-concepts.pdf>, pp. 13.

24. See National Security Council, 1997 in Badrudin, 2012, pp. 87.

25. Hiew, K.L., 1996. Flood Mitigation and Flood Risk Management in Malaysia. *Proceedings of International Workshop on Floodplain Risk Management*. Hiroshima, Japan. Nov, 1996, pp. 208.

the formation of National and State Disaster Management Committees, there is also the District Disaster Management and Relief Committee. The District Level Committees are responsible for the formation of sub-committees (if necessary) at *mukim* (parish), village or residents association (or *Rukun Tetangga*) levels to assist with the on-scene disaster management.

According to NSC 20, disasters are managed through three levels. Disaster Level I is under district jurisdiction. This type of disaster is described as “an under controlled local disaster that has no potential for further outbreak...expected to be less complex and may result in small loss of lives and properties. This type of disaster will not be detrimental to the daily routines of the people at large.” Level I disaster will be managed at district level, with a limited external assistance.²⁶

The role of communities in disaster management in Malaysia could be improved. Members of the affected community, most of the time, see themselves as the receivers of assistance. Badrudin²⁷ describes this as a traditional relief approach where communities are considered as “victim” and “beneficiaries” of assistance only. For other communities (outside the affected areas), they consider it their responsibilities to donate foods, blankets or money and do volunteer works (cleaning up of disaster debris, distributing foods and other basic needs, etc.) for the victims. Such a perception is incorrect and should be changed. Rather, the community should actively participate in disaster preparedness. Carafano, Marshall and Hammond²⁸ suggest that as the federal government focuses the majority of its efforts on preparing for catastrophic disasters, the local communities should oversee relief efforts until national resources can be requested, marshalled, and deployed to the scene. The active participation of the community in DRR is also the main target of HFA and SFDRR.

Badrudin describes disaster preparedness as “a holistic and long-term approach which incorporates vulnerability reduction as part of the development planning process” and “this

26. Badrudin, 2012, pp. 88.

27. Badrudin, 2012, pp.88.

28. Carafano, J.J., J.A. Marshall and L.C. Hammond, 2007. Grassroots Disaster Response: Harnessing the Capacities of Communities. *Background*, No. 2094. The Heritage Foundation. 28 December 2007, pp. 2.

comprehensive approach recognizes that disaster reduction is most effective at the community level where specific needs are met.”²⁹ The community is highlighted as one of the important components in DRR.

Disaster preparedness is also regarded as follows:

...an initiative that is intended to increase readiness and knowledge among the various stakeholders regarding the risks, related agencies, preventive measures and other disaster related information. It seeks to improve the overall preparedness towards a disaster or at least the type of disasters that is likely to happen at a particular locality.³⁰

There are some researchers that see disaster preparedness as a cycle within pre-disaster stage in the disaster management cycle,³¹ while others view it as a process that includes pre- and post-emergency measures. Such processes are intended to minimise the loss of life, and to organise and facilitate timely effective rescue, relief, and rehabilitation efforts in case of disaster (e.g. organising simulation activities to prepare for an eventual disaster relief operation).³²

In addition, the International Federation of Red Cross and the Red Crescent Societies (IFRC) define disaster preparedness as any measures taken to prepare for and reduce the effects of disasters. That is, to predict and, where possible, prevent disasters, mitigate their impact on vulnerable populations, and respond to and effectively cope with their consequences. Disaster preparedness also provides a platform to design effective, realistic and coordinated planning, reduces duplication of efforts and increase the overall effectiveness of National Societies, household and community members’ disaster preparedness and response efforts. Disaster preparedness is also a continuous and integrated process resulting from a wide range of risk reduction activities

29. Badrudin, 2012, pp. 88.

30. Dorasamy *et al.*, 2010, pp. 22.

31. Dorasamy *et al.*, 2010, pp. 22.

32. Alvarado-Corona, R. et al., 2014. What can be Learnt from Past Disaster? Analysis of Mw 8.8 Mega Earthquake of Central Chile with MOET. *Jordan Journal of Earth and Environmental Sciences*. Volume 6, Number 1, pp. 1.

and resources rather than from a distinct sectoral activity by itself. It requires the contributions of many different areas—ranging from training and logistics, to health care, recovery, livelihood to institutional development.³³

However, for individuals or citizens, the real disaster preparedness means being ready to help one's family, friends, and neighbours when a disaster or an emergency strikes.³⁴ Thus, the main focus of citizen and community preparedness is for them to be the “first responder” and “self-sufficient” when disaster happens.

There are various advantages when communities are well-prepared and actively participate in any disaster events. A well-prepared community has the ability to provide immediate assistance in any disaster event. The first 72 hours of disaster is the most critical time. In catastrophic incidents, bringing in outside assistance during this period is difficult, hence, the most effective responses come from those who are closest to the scene.³⁵ This is where the community acts as the “first-responder,” helping not only oneself and the family, but also the closest neighbour, especially those who are seriously affected and vulnerable members of community. However, this can only be done if the community is a well-prepared community.

Community preparedness also helps to ensure the efficiency in the distribution of aids. Federal help cannot arrive fast especially when the disasters are serious and widespread. Federal aid in extreme disasters should be targeted first at the most dire situations, where lives are in grave peril. Thus, if communities can take care of themselves and their neighbours, then the national assets can be focused on the most desperate situations.³⁶

Each disaster has its own characteristics. Even if the same type of disaster happens in the same area, the impact will

33. IFRC (International Federation of Red Cross and Red Crescent Society), 2000. Introduction to Disaster Preparedness, Disaster Preparedness Training Programme, pp. 6, available at <http://www.ifrc.org/Global/Publications/disasters/all.pdf>, accessed on 8 June 2016, 1.47 p.m.

34. Kapucu, N., 2008. Culture of preparedness: Household disaster preparedness, *Disaster Prevention and Management*. Vol. 17, No. 4, pp. 526.

35. Carafano, Marshall & Hammond, 2007, pp. 2.

36. Carafano, Marshall & Hammond, 2007, pp. 2.

definitely be different and thus, need a different kind of response. Therefore, the involvement of the community in any disaster event helps to provide detailed information on the affected area. The community which has been living in the area usually has detailed information on its members member and the surrounding area. Thus, the participation of the community in disaster response will help to determine priority needs and culturally appropriate interventions for the affected community. At the same time, the community can help to actively engage people to work for their community's own rehabilitation and development.³⁷

What type of preparations does the community need to be "self-sufficient" for the first 72 hours of disaster? Carafano, Marshall and Hammond³⁸ believe that in terms of community disaster preparedness, the basic components needed are: a disaster supply kit, a family emergency and communication plan, a shelter-in-place or evacuation scheme, and common-sense guidance for identification of potential terrorist threats.

However, Lichterman³⁹ divides disaster preparedness at community level into three different phases that are: basic preparedness, neighbourhood response teams and advanced training. Basic preparedness involves assisting individuals in preparing their home and family to cope with disaster event. The main activities involve reducing household hazards; preparing emergency kits; developing evacuation plans; knowing what to do in the event of a variety of disaster events; and developing family notification plans.

For neighbourhood response teams, citizens are trained in organising emergency response capabilities at the neighbourhood (community) level. Included in these neighbourhood courses are: setting up a neighbourhood response area; choosing a block captain; and establishing emergency response teams to address issues such as search and rescue, safety and utilities, and damage assessment, emergency communications, first aid, shelter, and special needs.

37. Karadag, C. O., and K.A. Hakan, 2012. Ethical Dilemmas in Disaster Medicine. *Iranian Red Crescent Medical Journal*, 14(10), pp. 610.

38. Carafano, Marshall & Hammond, 2007, pp. 3.

39. Lichterman, J.D., 2000. A "Community as Resource" Strategy for Disaster Response. *Public Health Report*. 105 (2-3), pp. 264.

Next, the advanced training phase encourages communities to establish advanced training programmes designed to augment public safety and other emergency response personnel in order to optimise their response to large-scale emergencies. In such programmes, citizens acquire hands-on experience in fire suppression; search and rescue; damage assessment; incident management; disaster medical aid; disaster mental health; and emergency communications.

The community has a significant role in disaster preparedness. The purpose of community disaster preparedness is to empower them to act accordingly in the event of disaster, not only to help oneself and the family, but also to assist other people, too. This is vital as the first 72 hours of disaster is a critical moment and in such a situation, not all disaster areas are reachable for relief effort and aid distribution. Thus, the community is the first group that can offer useful help or assistance to the victims.

Community Disaster Preparedness in Malaysia

As mentioned, the government, including the Federal and State Governments, and agencies under both jurisdictions, play a key role in disaster management in Malaysia. Such roles start from the formulation of the policy on disasters, disaster preparedness, search and rescue mission and rebuilding of the affected areas. However, the role of the community is quite invisible due to different reasons such as lack of discussions on the role of society in disaster management, failure to highlight the function of communities in disaster management or an underestimation of the community's capability to be part of the overall disaster management.

In Malaysia, people are encouraged to make disaster preparedness through campaigns on television, radio and the social media. In the campaigns, they are advised to make preparations for disaster. Among the advice⁴⁰ are:

40. The advice can be assessed at [Disaster] Tips and Advice, Disaster Portal under National Disaster Management Agency (NADMA) webpage, [www.http://portalbencana.ndcc.gov.my/](http://portalbencana.ndcc.gov.my/)

Disaster Preparedness in Malaysia

- (a) to keep important contact numbers such as those of family members, neighbours, police stations and fire brigades for use in an emergency;
- (b) to be alert to environmental conditions, sound or warning signals and identify high and safe routes to evacuation centres;
- (c) to be ready to move if instructed by authorities; to get current weather updates and flood situation through the radio, television and the internet;
- (d) to keep all important documents in containers, bags or files in high places and are easily retrieved if it becomes necessary to move to an evacuation centre;
- (e) to prepare for basic necessities that are most important like baby milk, medicine, flashlights, clothing bags and other equipment before being instructed by authorities to move; and
- (f) to save sterile water in the bottle for cooking and as drinking water.

Indeed, the campaign provides quite comprehensive advice on what and how to prepare for emergencies. However, we are uncertain to what extent the advice are taken by victims due to a lack of information on how Malaysian communities prepare for disaster. However, a study done by Ang⁴¹ on the adaptation of a Kota Bharu community towards flood (monsoonal type) shows how the community prepares for flood disaster. In the study, Ang mentions that some of his respondents prepare basic food like rice and canned sardines to face the monsoonal flood. Besides that, they also prepare a boat as a means of transportation when the water rises. Thus, this shows that communities in affected areas are ready to face disasters with basic preparation.

41. Ang, K.H., 2015. An Adaptation of Kota Bharu Community towards Monsoon Flood. *International Research Journal of Interdisciplinary and Multidisciplinary Studies*. Vol. 1, Issue 7, pp. 104.

Another study by Wan, Nor and Mohammad⁴² discovers different information. The study sought to understand what the victims of the 2014 floods (in Kelantan and Johor) views were of the disaster. Even though it is a brief study, responses by the respondents are highly interesting to highlight. The victims admitted that they did not make any preparation before the disaster (the 2014 major flood). One of the respondents admitted that he/she did not make any preparation because he/she had assumed that a major flood would never hit his or her village. Another victim acknowledged the importance of community preparedness when he/she suggested that each village should form a “flood community” with proper planning before, during and after the flood and each community group should be given boats to transfer members of the community to safe areas or evacuation centre.

Another study in Segamat on the cognitive preparedness of flood disaster concluded that the significant destruction of property and loss of life that occurred as a result of the floods in Segamat did not come as a surprise, as the level of preparedness among Segamat population was low.⁴³ The study concluded that the significant loss of property was considered as an indication of unpreparedness of the community towards disaster.

However, some NGOs and government agencies have started efforts to provide food-kits to victims in affected disaster areas. For example, the Welfare Department through the Federal Agriculture Marketing Authority (FAMA) prepare food-kits that contain 15 types of ready-to-eat food such as oats, porridge, instant noodles, bread, water etc.⁴⁴ Although a highly commendable initiative, it is only basic and hardly empowers community disaster preparedness. Rather, food-kits should be distributed to the poor communities who are expected to be

42. Refer to Table 1 in Wan Nur Tasnim, W.H., Nor Hadayati, Z. and Mohamad Nazir, A., 2015. Knowledge Sharing and Lesson Learned from Flood Disaster: A Case in Kelantan. *Journal of Information System: Research and Innovation*. Vol.9, No. 2, pp. 4-5.

43. Tuan Pah Rokiah, S.H., Baharum, M. and Hamidi I., 2014. Kesediaan Kognitif Menghadapi Banjir bagi Meminimumkan Kemusnahan dan Kehilangan Nyawa. *Prosiding PERKEM ke-9*, pp. 855.

44. *Kosmo*, FAMA prihatin pada Mangsa Bencana, Ruangan Jurnal. Wawancara Minggu ini, Disember 6, 2015.

isolated when disaster occurs unexpectedly so that they have food supplies until assistance arrives from the SAR operations. Neither is it a good practice to hand over food-kits to the victims at relief centres since cooked food is already provided there by the Welfare Department.

Based on the above discussion (and personal observation), there is an urgency for improvement in community disaster preparedness in Malaysia. However, this is not easy as there are several challenges that need to be addressed.

Community Disaster Preparedness: The Challenges

There are challenges that need to be addressed in order to enhance community disaster preparedness in Malaysia. One of the most significant challenges is to change the way community (or society) think about disaster. Since Malaysians rarely experience major catastrophes, there is a tendency among them to feel complacent about it. Most of the time, the perception of the society is that major disasters will not affect their homes or villages. The perception is even worse for communities which are not directly affected by disasters or have never experienced any disaster event. Such kind of mindset affects the community's action, preparedness, and their level of concern towards disaster.

Dorasamy et al.⁴⁵ in their research on ICT and disaster preparedness in Malaysia found that their respondents were only concerned about specific natural disasters that might affect Malaysia. Most of the respondents were mainly concerned with disasters such as household fire, wildfire, landslide, windstorm, flood, tsunami and earthquake. The research findings also show that the majority of the respondents did not give an appropriate level of concern. This reflects that they were unsure of risks posed by geo-hazard phenomena. The research shows the community level of concern for disaster in Malaysia. If the community does not worry about the possibility of disaster occurrence, then disaster preparedness is also not in the list of their concerns.

Disaster-affected communities had undertaken some kind of preparedness in order to survive the disaster impact. This is

45. Dorasamy, *et al.*, 2010, pp. 25.

only true for the community living in disaster-prone areas. The community did some basic preparations such as packing foods and medication as well as having a boat for transportation to higher ground during flood events. However, disaster preparedness at the level of community should also involve reducing hazards, developing community evacuation plan, establishing emergency response, emergency communication, hands-on training, and search and rescue.⁴⁶ It could be concluded that Malaysia lags behind in terms of community disaster preparedness.

One of the most significant challenges for authorities in mobilising public preparedness is crafting and communicating appropriate warnings that will motivate individuals to prepare and respond. To be effective, risk communications must be credible, understandable, and actionable. Choosing an appropriate spokesperson to deliver news and recommendations is critical.⁴⁷ Disseminating information has been a challenge in community disaster preparedness in Malaysia. The common issues are on what type of information that needs to be disseminated, how much information is needed, who should disseminate the information and how to disseminate it? As for the present, the government plays a central role in disseminating information. But, to be more effective, the government needs to engage local community leaders or religious leaders to smoothen the dissemination of disaster information as they are close to the local community, have good relationship with their members and able to speak in the local language.

Another major challenge is the lack of funds for training and conducting disaster preparedness and readiness for local communities.⁴⁸ Without adequate funds, all planning for disaster preparedness could not be effectively implemented.

The Role of Faith-based Organisations (FBO)

In the Malaysian context, it is appropriate to highlight the role of faith-based organisations for their significant roles in the society.

46. Lichterman, 2000, pp. 264.

47. Carafano, Marshall & Hammond, 2007, pp. 3.

48. Dorasamy *et al.*, 2010, pp. 23.

Faith-based organisations in the Malaysian context refer to all faith-based NGOs or any religious community that base their activities on their beliefs or places of worship.

For example, in the Muslim community, the mosque or surau (smaller than a mosque) is an important entity in their daily life. It is a place where Muslims meet regularly for prayers and other activities such as religious classes, and community meetings. Some mosques even have convenient shops and conduct ICT classes for youths in the community. Sometimes, the community uses the mosque or *surau* compound for sports activities or wedding celebrations. Thus, the mosque or *surau* has its own unique community. Most of community-members know and rely on each other for any kind of assistance and support, especially related to the spiritual-based kind. Usually, a mosque or *surau* has its own leader who is also considered as a respected leader in the community.⁴⁹

One disaster research study found that when the community ties “are strong, supportive, and responsive to the individual’s physical and emotional needs, the capacity to withstand and overcome stress is heightened.”⁵⁰ Thus, such a strong and close relationship in a religious-based community is an advantage in terms of disaster preparedness.

Religious leaders can also play important roles in community disaster preparedness. Religious leaders would be the most valuable source of information. They are able to reach out effectively to individuals in the event of a crisis.⁵¹ As such, community risk communication programmes should be developed that identify, educate, and empower the religious leaders that act as spokespersons before a disaster.⁵²

49. Malaysia is a multi-ethnic and multi-religious country. Muslims conduct their religious activities in mosques (or *suraus*), whilst other religious-based communities such as Hindus, Buddhists and Christians conduct theirs in Hindu temples, Buddhist temples and churches respectively. The strong and close religious-based community affiliation should be an advantage for community disaster preparedness.

50. See Fritz, 1996 in Carafano, Marshall & Hammond, 2007, pp. 4.

51. See Hooke & Rogers, 2005 in Carafano, Marshall & Hammond, 2007, pp. 3.

52. See Hooke & Rogers, 2005 in Carafano, Marshall & Hammond, 2007, pp. 3.

FBO could be the important sources of support in spiritual and psychological dimensions. It is undeniable that in disaster situations, communities will feel miserable and depressed. In such a situation, they have a strong need to express their plight to another person. A study shows that one of the main coping mechanisms in a distressed community is to speak to others.⁵³ In this instance, FBO can offer such help and assistance. In fact, one of the greatest services that FBO can provide is spiritual relief.⁵⁴ Losing family members, friends and property sometimes cause people to be depressed, angry or possibly guilty. In this sense, spiritual support or relief sometimes helps to ease the burden.

The above discussion shows that FBO or religious-based community has a significant role in disaster preparedness. However, they can only function if they get enough support in terms of funding, training, information and appropriate tools. Thus, the FBO needs a strong support from the government and the private sector.

Conclusion

Indeed, the level of community disaster preparedness in Malaysia needs to be improved. The community should change from focusing on basic preparedness to advanced level of preparedness that includes training, search and rescue, community evacuation plans and rehabilitation activities. To achieve this, they need support from central, states or private sectors in terms of funds, appropriate tools, training, skills upgrading, and knowledge enhancement.

In order to create better preparedness, community level of awareness and knowledge need to be upgraded. Thus, there is an urgent need for more and better as well as structured awareness programmes on DRR. This can be done through formal or informal education by the government or private sectors, that include using easy to understand language, pictures or brochures in disaster awareness and education programmes. Besides that,

53. Kalayjian, A. et al., 2002. A Cross-cultural Study of the Psychosocial and Spiritual Impact of Natural Disaster. *International Journal of Group Tensions*, Volume 31, No. 2, Summer 2002, pp. 182.

54. Carafano, Marshall & Hammond, 2007, pp. 5.

the Malaysian government should also consider developing a disaster learning centre in the effort to enhance societies' awareness, knowledge and skills in DRR. The centre should focus on hands-on learning for various types of disasters, both natural and man-made or man-induced disasters.

The role of the FBO is important in the Malaysian context. The potential and capabilities of the group should be utilised in order to create disaster-prepared communities. In order to function effectively, the FBO needs adequate support from all stakeholders.

Indeed, further studies need to be done to better understand community disaster preparedness in Malaysia. The findings of these studies will reveal not only the current situation in community disaster preparedness, but also the gaps in the DRR. Therefore, such information can be used to create better education and awareness programmes on the DRR at the community level.