

Kelantan Flood 2014: Reflections from Relief Aid Mission to *Kampung Kemubu*, Kelantan

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Abstract

Almost every year Kelantan is experiencing flood phenomenon, and flooding is seen as a common natural disaster in the area. December 2014 heavy rains fell caused massive flooding in many areas in Kelantan leading to destruction of livelihood of local communities. This paper presents researchers' experiences on the site of flood area in *Kampung Kemubu*, Kelantan, Malaysia in January 2015 while acting as volunteers working in a relief aid mission for the flood disaster. The paper utilized a qualitative design to meet the objective. Qualitative data was gathered through field observations on the affected areas in terms of live and livelihoods aspects of local settlement. Physical aspects such as houses, roads, schools, community halls, and other public facilities in the community are lost. Nearly 90 percent of the houses in the area were destroyed. The economic losses from the flood are unexpected and typically spread beyond the flooded area and may last longer than the flood itself. In terms of psychosocial consequences, adults and older persons vary in terms of their impacts and acceptance of disaster. For the ones who are more religious are seem to be less vulnerable than the ones who are less religious. Villagers who are less religious are likely to manipulate the situation to get sympathy from the relief aid mission. Thus, management, particularly coordination of all volunteers working in relief aid mission for floods disasters is extremely important.

Keywords: Flood; Climate change; Climatic hazards; Human health; Environment

1. Introduction

As we enter the new year of 2015, it is important for us to reflect back what was happening in the year 2014. One of the unforgettable event happened at the end of 2014 was a massive flood in the state of Kelantan, Malaysia. Kelantan has experiencing massive flood for seven days from December 26, 2014 to January 2, 2015. Kelantan has 10 territories, and eight of these territories experiencing massive flood. At the end of December 2014 heavy rains fell causing massive flooding in most areas in Kelantan lead to destruction of livelihood of local communities. When Kelantan flood first hit the news almost a month ago, the floods seem to me as usual phenomenon, like the ones happen before. Almost every year the state is experiencing flood phenomenon, and flooding is seen a common natural disaster. When I followed the news from television, I noticed that the massive flood and the destruction from the flood were unusual and difficult to describe. No word can describe the seriousness of the flooding.

Two weeks later I was offered a chance with four more academic staffs from School of Social Development, UUM to joint in relief aid mission as volunteer for flood disaster in the area. At the sites of the affected areas, we have seen first-hand the worst of remnants left by the massive flooding. Access to the damaged areas is heavily restricted. While driving using a 4-wheel and walking at the sites, we saw evidences of high water level, seas of mud and crooked railway tracks. We have also witnessed the suffering of homeless people, living in a temporary rant. Children cannot attend school as all schools in the district are closed due to the seas of mud in all classrooms.

2. Objective of the Study

The objective of this paper is to present the researchers' experiences on the site of flood area in *Kampung Kemubu*, Kelantan, Malaysia while acting as volunteers working in a relief aid mission for the flood disaster. In particular, this paper is aimed to describe:

- 2.1: the role of UUM,
- 2.2: the coordination of the relief aid, and
- 2.3: the consequences of the massive flood as experiences by the victims.

3. Literature Review

We realize that many parts of the world are experiencing flood phenomenon. Flood events can take many forms, including slow-onset riverine floods, rapid-onset flash floods, accumulation of rainwater in poorly-drained environment, and coastal floods caused by tidal and waves extremes (Few, Ahern, Matthies, and Kovats, 2004). Normal floods are expected and welcomed as they provide rich soil, water and means of transport, but flooding at a big scale may causes damage to life, livelihoods, and environment (ProVention Consortium, 2008). Flooding is one of the most widespread of climatic hazards and poses multiple risks to human health (Few, Ahern, Matthies, and Kovats, 2004). Estimates suggest that for the year 2000 – 09, flooding affected approximately 949 million people worldwide, where the vast majority of these, 900 million, lived in countries in medium human development (IRFC, 2010; Crabtree, 2012). Center for Research on the Epidemiology of Disasters (CRED) shows that 373 natural disasters took place in 2010, killing nearly 300 000 people and affecting over 200 million others, at a cost of nearly USD 110 billion (Sakar, Begum, Periera and Abdul Hamid Jaafar, 2013).

Consequences from such phenomenon are many and complex. It may cause major infrastructure damage, including disruption to roads, rail lines, airports, electricity supply system, water supplies and sewage disposal systems (WHO, 2002). Most people may think that floods are a climatological phenomenon and climate variability that are influenced by geology, geomorphology, land use and other conditions (WHO, 2002), but floods by nature are complex events, caused by a range of human vulnerabilities, inappropriate development planning and climate change (APDC, 2005; ProVention Consortium, 2008). Thus, weather, climate and climate change are central issues when one tries to describe any kind of floods.

Weather, climate and climate change are interrelated concepts. Weather is a set of meteorological conditions, i.e. wind, rain, snow, sunshine, temperature, etc. at a particular time and place, while by contrast, the term climate describes the overall long-term characteristics of the weather experienced at a particular place (ISDR, 2008). Climate change refers to a long-term changing trend of climate (Surina Othman, 2011). If the assessment of the Intergovernmental Panel on Climate Change (IPCC) are correct, climate change is no with us (IPCC, 2007; Crabtree, 2012). Climate change is a serious issue because it may result in serious and adverse impacts. Among the expected consequences of the climate change are extreme weather events, increased sea levels, and the melting of glaciers all of which can lead to an increase in the number of flooding disasters (Crabtree, 2012).

Recognizing the critical issue caused by climate change, and in order to help people understand how the earth's climate system works as well as to share the knowledge about the climate change itself, the Intergovernmental Panel on Climate Change (IPCC) was formed by the World Meteorological Organization (WMO) and the United States Environment Programme (UNEP) in 1988 (Surina Othman, 2011).

For the past few decades, Malaysia has also witnessed climate change through increasing temperature, changing rainfall patterns, and extreme weather conditions that lead to increasing incidence of climate related disasters, including floods (Sakar, Begum, Periera and Abdul Hamid Jaafar, 2013), consistent with the global warming trend.

On December 2014, three states in Malaysia, i.e. Kelantan, Terengganu and Pahang received heavy rains that caused massive flooding. In that particular case, Kelantan was the most severe and suffered the greatest damage, where eight territories were affected severely. Kelantan Flood 2014 was unexpected and unusual flood. It is particularly the biggest and the worst flood in the state in the past 100 years. Even, up to the time we are preparing to finish this article, the number of evacuees in Kelantan remained at 225 from 62 families at eight relief centers in Kuala Kerai (Malay Mail Online, 26 January). Many are homeless and still sheltered in temporary rant. I see that there is an urgent need for the government to conduct a thorough need assessments and post-mortem to have a detail and real causes of massive flooding, so that we can learn the lesson and prepare plan for the future. An examination of the psychosocial consequences of the flooding is crucial to help the vulnerable population start their normal daily live.

4. Materials and Methods

Experts said that there were two main reasons behind the unprecedented magnitude of this flood, i.e. the changing climatic patterns, and the result of the uncontrolled land management and exploitation of land resources. The Malay Mail Online (5 January, 2015) stated that The National Security Council (NSC) confirmed the massive flood that hit Kelantan

was the worst in the history of the state. The water levels of the recent floods superseded the floods of 1967.

Five faculty members from School of Social Development have been sent to Kelantan and seven to Pahang as volunteers from 16 to 19 January 2015. We are very grateful to our university for giving us the opportunity to be parts of the volunteer team. The present paper is aimed at sharing an experience on the psychosocial consequences of the flooding in Dabong, particularly in *kampung* Kemubu, in the state of Kelantan, Malaysia, the site of flooded area. The author with four more faculty members from UUM was at the site of flooded areas in Dabong district, particularly in *kampung* Kemubu acting as a psychosocial support group team to assist the victims. *Kampung* Kemubu, situated at the river bank of Galas River was the most affected village in the area. Galas River busts its banks and destroyed surrounding homes, roads, bridge, and other community facilities. The nearest town is Dabong, functions as an administrative area for the area also affected. There were about 400 families (houses) in Kemubu, and nearly 90 percent of the houses of *kampung* Kemubu were destroyed following the overflow of Galas River.

Floods also had cut off the route connecting *kampung* Kemubu and other areas surrounding Dabong district, making the delivery of aid difficult. Rescue boats were also unable to traverse the strong currents. As we entered to the flooded sites while acting as volunteers working in relief for flood disaster in the area, there are also hundreds of group of volunteers flocked into the area and the roads become congested. There are also dozens of buses from various government agencies entering the affected areas to send their volunteers to assist the victims.

To share this experience, we utilized the qualitative information gathered from observations conducted on the affected areas from 16 to 19 January, two weeks right after the floods event. Basically, the main purpose of this article is to describe how the people in Kemubu experience the massive flood, and try to find the answer of why they show certain behavior relating to their experience. In other words, in this research we want to understand the experience they have when facing the massive flood and how they react to the difficulties. Quantitative approach is seen not so suitable to apply in this situation as we do not mean to collect numerical data on a large number of individuals. The victims are also in a very stressful situation that does not allow us to collect data using any instruments. To best fit this objective, this study uses a qualitative research, particularly a participant observation to collect the relevant data. This is also in line with what Merriam (2009) who states that qualitative researchers are interested in understanding the meaning how people make sense of their world and the experiences they have.

5. Results and Discussion

As stated, the present paper presents the information gathered from observations conducted at the site of affected area of flood. The observations on the flood area are concentrating on three interrelated aspects, i.e. physical loses, economic loses, and psychosocial consequences of the flood. Most of the information gathered for this article is from observation conducted in *kampung* Kemubu, Dabong district, one of the most severely affected areas in the state of Kelantan.

5.1 The Role of UUM

As to share concern with others, Universiti Utara Malaysia (UUM) has launched the UUM Humanitarian Aid Mission to help flood victims in the worst-affected areas in Kelantan, Terengganu and Pahang. The functions of the team are to assist in coordinating and mobilizing the relief efforts. UUM also launched the Flood Victims Fund to collect donations in the form of cash and basic necessities such as food, drinking water, and clothes to be sent to the victims. On January 6, UUM launched the First Phase of its UUM Post-Flood Humanitarian Aid Mission to help the victims in the post-flood clean-up operations in the states affected by the floods. The post-flood clean-up operations involved the cleaning up of the school grounds in Machang district, in the state of Kelantan. A total of 216 volunteers have been involved in Phase 1 of this mission.

The volunteers of the phase one of this mission consist of members of UUM staff, the Sultanah Bahiyah Foundation (YSB), Malaysian Red Crescent Society (MRCS) Kedah branch, Kedah State Student Council, Kedah Amateur Radio Association, and Malaysia University Volunteer Council (MASKUM). A total of six buses, a truck, a four-wheel drive vehicle and a multi-purpose vehicle have been used to mobilize the volunteers and distribute the contributions and donations throughout the mission. UUM has also offered medical and counselling services to victims who have been traumatized by the disaster. The UUM Post-Flood Humanitarian Aid Mission Phase 2 has been commenced on January 16, 2015. The second phase of the Post-flood Humanitarian Aid Mission saw the involvement of 560 volunteers comprising UUM staff and students. The volunteers involved in post-flood cleaning-up activities in Kelantan and Pahang commencing 16 to 20 January 2015. A total of 250 UUM staff and students have been sent to Machang and Dabong district, while the rest has been sent to Pekan district, in the state of Pahang. Volunteers helped to

distribute contributions and donations made by the UUM campus community, while students did the post-flood clean-up process. The victims have been given in forms of money, rice, sardines, clothing, milk, diapers for babies and other much-needed essential goods.

5.2 Relief Aid Coordination

Immediately aftermath of the flood, many parties, including various NGOs and individuals entered the village to give assistances in whatever means they can. We as volunteers, have assisted the victims with post-flood clean-up activities in *kampung* Kemubu commencing 16 to 19 January 2015. As we entered the village, we noticed a lot of relief aid entering the site. Despite the roads are so small, the 4-wheels were quite difficult to drive through, the volunteers have played their roles effectively. This is something that the victims should be thankful. Unfortunately, the aid given, as I observe it, was not organized and distributed properly. They are lacked of coordination. NGO and other quarters individually walked their own way and developed their own means to distribute money and other essential goods to the victims. Thus, there are villagers who did not get enough goods, while there are others who get abundant of goods. To produce effective outcome they should worked in an integrated manner, and cooperation of all quarters is very essential.

5.3 Physical Loses

The consequences of flood are many. The physical loses of a flood are obvious, thus, one of the easiest ways to observe these consequences are through physical loses. Physical loses in this context are loses in terms of houses, furniture and ownerships. Also included in the physical aspects of these loses and damages are roads, schools, community halls, and other public facilities in the community. The most affected village in Dabong is *Kampung* Kemubu. *Kampung* Kemubu is built along the Galas River bank, one of the main rivers in Kelantan. As the village is situated on the river bank, the village is surrounded by low land areas and prone to flood. *Kampung* Kemubu has around 400 houses. 40 houses were totally destroyed, 27 houses unaffected by flood, and the rest were 90 percent destroyed. All the villagers were given tents for temporary placement. They built the given tents on the site of their original homes. They have lost everything, and have to sleep on these materials.

Roads to the place were nearly 60 percent destroyed. Before this all route to Kemubu was closed to all traffic. This situation makes the relief aid difficult to reach to the village. One big railway bridge which connected the village with outside villages also destroyed. Roads may only be used by 4-wheel drive. Authors together with four more faculty members have to use 4-wheel drive to distribute contributions and donations. School, although it has been opened, but still closed for teaching and learning activities. The work of cleaning the classroom is still not fully completed. School administrators had to use bulldozer for the cleaning-up to remove the sludge which reaches a height of more than three feet. In every community, there are centers which have been accepted as centers of interaction activities at the community level. Such center is known as gathering center. Examples of such centers are *kedai kopi*, *madrasah*, or community hall. All the centers, except one community hall had destroyed. In *kampung* Kemubu, we saw only one such community hall which is still unaffected by flood, but this apparently has been used as a center for the clothes collection.

5.4 Psychosocial Consequences

For most of the Kelantanese, flood is something like entertainment. They do not regard flood as a disaster. Floods are normal to them. They, especially the young, generally welcomed the floods as the floods provide them opportunities to meet other young people, particularly girls. These young girls and boys from remote areas will come out to have a kind of such yearly fun. But as reported by The Rakyat Post (January 22, 2015) although the people of Kelantan have annually endured devastating floods, this year floods was on an unprecedented scale.

Kelantan Flood 2014 is a very different one. According to the villagers, they have never seen the flood like this before. One of the villagers admitted that since his farther first started to build the house in *kampung* Kemubu, nearly 100 years ago, Kelantan did not experienced such a flood. For them this year flood is unexpected and unusual. Kelantan flood 2014 has produced multiple risks to the villagers. Flood has the potential to impact human life in the affected area. Floods may affect physical, social, economic, and psychosocial of the villagers, and have been reported to have a wide range of psychosocial and mental health impacts, including distress, anxiety, depression, and post-traumatic stress disorder (Paranjothy, et al. 2011). While physical consequences of flood are obvious and temporary, it psychosocial consequences may affects victims for the lifetime. It may cause a trauma that may last a lifetime. Only those who are better able to cope with these consequences will not expose to the long-lasting suffering.

Floods do not affect every person in the same way. Through short observation, we noticed that different people has different mechanism to face the disaster. Children might be more susceptible to the negative effect of flood. Although they are seen as happy, they are more vulnerable than adults. Vranda and Sekar (2012) who also observe the psychological impact of flood on children in India also show that children and adolescents are more vulnerable than adults to the traumatic events of disasters, and the effects can influence their personality development unless they are given a suitable intervention to address their coping skills. Adults and older persons vary in terms of their acceptance of disaster. For the ones who are more religious, are seen to be less vulnerable than the ones who are less religious. Although religiosity is difficult to measure, the level of religiosity can be detected through the level of acceptance of the disaster. Villagers who are less religious are likely to manipulate the situation to get sympathy from the relief aid. They are trying to get whatever contributions for their family although they have got the same things before.

6. Conclusion

The experiences and memories at the flooded sites will remain etched in our minds. Just to share, our observation on the victims of flood in Kemubu, Kelantan reveals a number of important findings. First Kelantan flood 2014 has produced multiple risks to the villagers. Flood has impacted physical, social, economic, and psychosocial of the villagers. Observation reveals that flood in the area has produced a wide range of psychosocial impacts including distress, anxiety, depression, and post-traumatic stress disorder. Second, the coordinating efforts are very crucial in facing the disasters. Coordination is also important for the effectiveness of humanitarian aid. The aids may produce effective outcome only when they were employed in an integrated manner. In facing Kelantan flood 2014, government officers, NGO and other parties, individually developed their own means to distribute money and other essential goods to the victims. There were no coordination between all parties, and third, we noticed that different people has different mechanism to face the disaster. For the ones who are more religious, are seen to be less vulnerable than the ones who are less religious. The level of religiosity is seen as positively correlated to the level of acceptance and patient in time of the disaster, and the villagers who are less religious are likely to manipulate the situation to get maximum sympathy from the relief aid.

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