

Postmortem Report on Disaster Response and Relief Operation

Incident: Fire Incident in Motithang, Thimphu

Date: 7th February 2020



Department of Disaster Management

Ministry of Home and Cultural Affairs

1. Background

The Department of Disaster Management is the nodal agency to lead all disaster management activities in the country and is mandated to promote, support and facilitate in reducing disaster risks in Bhutan. Moreover, as per the Disaster Management Act of Bhutan 2013, the department is mandated to monitor and evaluate measures taken for prevention, mitigation, preparedness and response carried during the various phases of disasters. Therefore, the department has initiated to conduct post mortem study on major disaster incidents that occur within the country. Consequently, the department initiated a study on the fire incident that occurred in Motithang, below the Ministers' enclave.

On February 7, 2020 at around 6:00PM, 11 temporary structures/huts occupied by the Thromdey labourers located in Motithang below Ministers' Enclave were gutted by fire. In the incident, a total of 45 family members have been affected and all their belongings were lost in the incident. It is also reported that a 29 year-old woman (Kumari Darjee, an employee of the Department of Roads) lost her life in the incident.

2. Purpose of the Postmortem Study

This study was aimed at understanding the effectiveness of the existing disaster response mechanism in the country and to identify issues in implementation including the drawbacks of the mechanism itself. Accordingly, it would provide an opportunity for further improvement of the disaster management system. Besides that, the study will help policy makers to enact and review existing policies and help the department and the districts in enhancing their disaster response mechanism. Further, it is expected to help in educating and advocating the district officials and the public on disaster risks.

3. Objective of the study

The main objective of the study is to;

- a) Study the effectiveness of response coordination mechanism during the disaster;
- b) Study gaps/challenges during the course of response; and
- c) Recommend corrective measures and way forward to ensure better response during disasters.

4. Methodology of the study

For the purpose of the report, the department developed a structured questionnaire, visited the site of the incident and conducted interviews with the key responders during the fire incident. The officials from the department namely Tsering Dorji and Kinley Gyem met with the Fire Services Division of Royal Bhutan Police (RBP) and the Thimphu Thomdey officials, since these institutions were the main responders during the Motithang fire incident.

5. Response and Relief Operations

a. Royal Bhutan Police, DeSuungs and Volunteers

The fire incident occurred at around 6:00 PM in the evening of 7th February 2020. A Thromde official residing in Motithang saw the incident and immediately informed the Thrompon, the Incident Commander. The Thrompon and other Thomdey officials immediately reported the incident to the Fire Service Division of the Royal Bhutan Police (RBP) Headquarter. Simultaneously, the incident was also reported in the De-Suung WeChat group.

More than 150 persons including the personnel from the RBP, De-Suung, Thromdey, teachers and students of Motithang Higher Secondary School, and the residents of the Motithang area under the supervision of Thimphu Thrompon took active part in the response.

The RBP Fire Services Division immediately contacted the RBP fire branch office stationed in Motithang and immediately deployed a total of 30 firefighter personnel along with 6 fire tankers and an RBP Headquarter drinking water tanker to the site of the incident.

As soon as RBP personnel received the command from the RBP Fire Services Division, the RBP fire team stationed in Motithang rushed to the site of incident. However, the narrow road in Motithang and many cars being of the residents being parked along the roadside impeded the free movement of the fire fighting tankers and thus, they could manage to reach the site of the incident only after six minutes from receipt of information. It was reported that Traffic Division, RBP were informed of heavy traffic

congestion during the time of incident and advised to explore various means to free the site for the responders.

Simultaneously, upon receiving the information of fire incident, the RBP also informed the Bhutan Power Corporation Limited (BPCL) to put off the main power line immediately. Unfortunately, Bhutan Power Corporation delayed in putting off the main power line and the RBP could not respond to the incident immediately.

It was reported that all camps were cramped together and lacked accessibility between the camps which impeded responders to respond effectively. In addition, lack of water sources in and around the site of incident too, hampered in responding the incident. It is learned that the capacity of each tanker is 1500 Liters and it lasts only for five minutes and after that they had to travel more than a kilometer to refill it. Thus, its time consuming and also hampers effective and timely response to the incident. The RBP suggested that it is important and more convenient to install fire hydrants in such strategic locations to ensure immediate and effective response during such incidents.

Despite these obstacles, the responders could manage to protect nine units of huts adjoined with the five units that were gutted by the fire. It is also learned that no evacuation area was identified in the area and residents were not aware of disaster safety measures, thus they could not carry out head counting during the incident. The responders took more than 15 minutes to contain the fire.

b. Thimphu Thromdey and Gyalpoi Zimpon Office

The Office of the Gyalpoi Zimpon (OGZ) and Thimphu Thromde immediately responded and arranged food and shelter for the victims. The shelters for victims were arranged in the Youth Development Fund office. Some of the victims were taken care of by their relatives. The OGZ also provided emergency relief kits and delivered His Majesty's Royal Semso to the victims to meet their immediate needs. The OGZ had also arranged and provided all the necessities for 13 school going children affected by the fire incident so that they continued their studies without any problem.

Since previous camps were clustered together and it being an unplanned settlement, it hampered in combating the fire, due to lack of accessibility. Recognizing those gaps, Thromdey promptly instituted an Emergency Management Team and convened a meeting for immediate reconstruction. Planning, preparation of structural design and site development for reconstruction was carried out the very next day. It was informed that the reconstruction works were scheduled to be completed within two months. However, they were worried that the scarcity of budget may hamper the completion of work as targeted.

6. Findings

- a. The overall response coordination was carried out by the Thimphu Thrompon, the Incident Commander and no major problems were found in response coordination.
- b. Mobile phone and social media (WeChat) was used for coordinating response during the incident.
- c. RBP, DeSuung, Thromde, volunteers, teachers and students of MHSS responded to the incident immediately as soon as they noticed the incident.
- d. Responders protected nine units of huts adjoined with the 5 units that were gutted by the fire.
- e. The Office of the Gyalpoi Zimpon in collaboration with Thimphu Thromde arranged shelters and food for the victims.
- f. Office of Gyalpoi Zimpon provided set of HM Relief kits and delivered Royal Semso to the victims. In addition, OGZ provided basic necessitates to thirteen students to continue their education without hindrance.
- g. The labour camps were clustered together and lack of accessibility and evacuation path hampered in responding to the incident efficiently and effectively.
- h. Traffic congestion due to narrow road towards the camp site in Motithang and cars parked along the road side hindered the free movement of fire fighting vehicles to the incident site.
- i. Use of limited number of out-dated fire engines possessed a challenge in providing efficient services during emergencies.
- j. Unavailability of water sources and water reserve tanks in and around the site also hampered in responding to the incident effectively, because fire engines had to travel a kilometer to refill the tank.

- k. It is important to install fire hydrant systems in strategic locations to prevent the loss of time.
- l. It is found that the residents were not aware of disaster safety measures and no evacuation area was identified, thus they could not able to carry out head counting of the victims during the incident.
- m. BPC's delay in putting off the main power line caused further delay of the standing responders to act.

7. Recommendations

- Disaster Risk Reduction measures have to be put in place like raising multi-hazard safety awareness, identifying evacuation routes and sites and conducting mock drill to prepare the community members to respond safely.
- Clear path of accessibility should be maintained at all times in such settlements.
- Codes and ethics of construction need to be considered prior to the construction of huts/temporary settlements in order to prevent and mitigate such incidents in future.
- Good quality wiring and other construction materials to be used in such construction to prevent and mitigate the risk.
- As suggested by the RBP, Fire hydrants and water reserve tanks to be installed in strategic locations to prevent loss of time during disaster.
- Coordination among relevant stakeholders is important during the times of disaster.
- Fire Service Division, RBP and Bhutan Power Corporation needs to develop a bilateral SOP to disconnect power supply during fire incidence.

8. Reconstruction

Implementing the lessons learnt from the fire incident, the Thromde has immediately started the reconstruction based on safe construction practice. With only roofing left, the new buildings are almost over as shown in the following pictures.

Annexure

Thimphu Thromdey immediately after the fire incident instituted an Emergency Division Management Team and took up the reconstruction work and the progress report of the works were shown in pictorial form as follows;



