

## **EXERCISE REPORT**

### **FLOOD DISASTER RESPONSE MOCK EXERCISE**

#### **1. Introduction**

The Himalayan State of Uttarakhand is very vulnerable to the flash floods and cloud bursts. The events in the past have forged havoc and have inflicted huge damages. As a step towards preparing for future disasters and building disaster resilience Disaster Management Department of Uttarakhand with the help of NDRF, DMMC and THDC conducted a mega mock exercise on flood response in Rishikesh. The exercise was conducted to check the disaster preparedness of different departments and agencies responsible for disaster management and the people of Rishikesh vulnerable to floods and to spread awareness among the public. Moreover, since Rishikesh is comprised of jurisdictional areas of three districts of Uttarakhand, hence it becomes very necessary that different departments and agencies of the three districts get well coordinated in such kind of events.

#### **2. Aim**

To make DM stakeholders and community so as to minimize the loss of life and assets in Rishikesh in flood like situations in future.

#### **3. Objectives**

- a) To check the preparedness, adequacy and efficacy of different stakeholders for Flood Response in Rishikesh and to review Disaster Management plan of the Distt.
- b) To enhance the skills and capacity of communities and key stakeholders through the practice of coordinated actions.
- c) To enhance coordination and synergize efforts of various Emergency Support Functions at the District level
- d) To aware the community members on what to do when they receive flood warning.
- e) To find gaps in the resource, manpower, equipment communication and systems at District.

#### **4. Scope**

The exercise was conducted in the areas both sides of Chandrabhaga River near Chandrabhaga bridge in Rishikesh where Chandrabhaga meets Ganga River. Municipal areas of District Tehri (north east of Chandrabhaga) and District Dehradun (south west of Chandrabhaga) fall in this area of Rishikesh.

#### **5. Participating Organisations**

- DMMC
- THDC
- District administration
- Police department and Jal Police
- Fire department
- Medical dept.
- Agriculture/irrigation dept.

- Animal Husbandry/vet dept.
- Transport dept.
- Electricity dept.
- Payjal dept.
- Municipality
- NGOs, Red cross, Civil Defence
- Community
- SDRF
- Rafting Association
- NDRF

## **6. Schedule of Programmes**

Activity	Date and time	Venue
Co-ordination Conference	Sep 14, 2016 1100 Hrs-1300 Hrs	Conference Hall, Bhagirathi Bhawan, THDC Rishikesh
Table Top Exercise	Sep 16, 2016 1000 Hrs-1500 Hrs	Community Hall THDC Rishikesh
Mock Exercise	Sep 17, 2016 1000 Hrs-1500 Hrs	Chandrabhaga area Rishikesh

## **7. Organisers**

Sh Amit Negi, IAS, Secretary (DM) and Sh Santosh Badoni Dy Secretary(DM) conceptualized the exercise. Planning of the exercise was made by Dr Piyush Rautela, ED, DMMC and Sh Bhupender, DMMC, with the help of Sh Roshan Singh Aswal, Dy Commandant of NDRF and officials of THDC, Rishikesh. DMMC and THDC Rishikesh facilitated the whole exercise in respect of administrative arrangements and logistics.

## **8. Excon**

Sh Roshan Singh Aswal, Dy Comdt of NDRF was Chief Exercise Controller who coordinated, managed and controlled all the activities of the Mock Exercise with assistance of Sh Bhupender Bhaisora of DMMC and DDMOs of Dehradun and Tehri Districts.

## **9. Evaluators/Observers**

Evaluators /observers were detailed for each activity of the exercise to judge the progress of the exercise activities. Dr Piyush Rautela, Executive Dir of DMMC was Chief Evaluator and with him 06 more evaluators having experience in disaster management were also detailed.

## **10. Conduct of Exercise**

### **Coordinating conference**

Coordinating Conference was held on Sep 14 at Bhagirathi Bhawan, THDC Ltd Rishikesh. Officials from DMMC, THDC, different departments of Dehradun and Tehri Districts, SDRF ect. and NGOs attended the conference. Dy Commandant Roshan Singh Aswal of NDRF coordinated and directed the conference and intimated about objectives, modalities and requirements for the Table Top and final Mock Exercise. A lecture on the basic knowledge of Incident Response System was also delivered to the participants by him. About 50 officials from various agencies were present during the conference.

### **Table Top Exercise (TTE)**

Table Top Exercise(TTE) was conducted on Sep 16, 2016 in the Community hall THDC Ltd Rishikesh. TTE was chaired by Sh Santosh Badoni, Dy Secretary(Disaster Management) Uttarakhand Govt. Sh Piyush Rautela, Executive Director, DMMC Dehradun was also present in the TTE. Dy Commandant Roshan Singh Aswal of NDRF run the table Top exercise presenting the scenario, putting injects and asking the responses.About 80 officials from various departments/agencies of the District of Dehradun and Tehri participated in TTE.

TTE was aimed at to make various departments and stake holders to acknowledge and to exercise their responses on the occurrence of real disaster situation and in subsequent developing situations in the district. The exercise was a method to test the Disaster Management plans of the departments and to adapt the plan as per the requirements of the IRS (Incident Response System) over the table so that the agencies are clear about their tasks and responsibilities prior to the actual Mock Exercise.

Following activities were carried out during the Table Top Exercise:

- a) Dy Secretary (Disaster Management) appealed to all the participants to actively participate in the exercise.
- b) SDM Rishikesh (Dehradun) and SDM Narendranagar (Tehri) presented their Disaster Management Plan and informed about the actions taken by the Distt Administration for preparedness and disaster mitigation.
- c) Medical Department, Food and Civil Supplies Department, Police Department and Irrigation Department of both the Districts also apprised about their preparations for floods.
- d) IRS setup were organised for the two districts.
- e) A Scenario of flood disaster in Rishikesh was painted and simulated injects were put by the controller before appointments of IRS and officials of the two districts responsible for taking actions in disaster situations, who in turn responded to the injects.
- f) The exercise was summed up by the Chief Controller, followed by closing address by Sh Santosh Badoni, Dy Secretary(Disaster Management) Uttarakhand Govt.

### **Mock Exercise**

Mock Exercise was conducted on Sep 22, 2016 in Rishikesh between 1000 hrs and 1600 hrs. About 600 officers and other officials/persons of District Administration, Police, other departments/agencies, NGOs and locals participated in the mock exercise. Following actions carried out in the mock exercise.

- a) Formats for assessment were issued to the Observers detailed.

- b) Sequence of events and administrative arrangements were finalized with States & District Authorities beforehand.
- c) Scenarios were formulated after due deliberations and the Mock Exercise was conducted as per scenario painted in a sequential manner.
- d) Alert of flushing of water from Tehri Dam was passed on to the SEOC(State Emergency Control Room).
- e) Ex-EOC was activated in Conference Hall of Bhagirathi Bhawan, THDC, Rishikesh. Representative of all concerned departments were called. IRS set up was activated.
- f) Actions were taken on ground by concerned stake-holders on orders from their own respective departments.
- g) Dehradun and Tehri Districts had earmarked their own Staging Areas where all the resources were assembled.
- h) Incident Command Posts were established near the operational sites for command & control.
- i) Resources were dispatched to the operational site for rescue operation.
- j) IRTs carried out rescue operation and evacuation.
- k) Evacuated persons were transported to pre-marked relief camps and those who required treatment were sent to pre-designated hospitals after giving them first aid at Medical Aid post.
- l) NDRF team as specialised disaster responders, carried out rescue and evacuation operation.
- m) On completion of the exercise all the responding forces/personnel assembled at the staging area where a hot wash and debriefing was conducted before their dispersal.

After the mock exercise debriefing of all responding teams was conducted at Staging area of Muni Ki Reti (Harbal Garden), where positive points and shortcomings were shared/intimated. A formal debriefing was conducted in the Conference Hall of THDC in which Main functionaries of IRS and all the observers participated. Feedbacks and the shortcoming noticed in the response system were discussed threadbare and noted for undertaking corrective measures.

## **11. Positives**

- (i) Disaster Management Plan has been prepared by the Districts to deal with any disaster situation in respective districts.
- (ii) Efforts have been made to have resource inventory at the District level.
- (iii) THDC in collaboration with DMMC has prepared inundation maps for different water levels in the Ganga river which is very useful in damage assessment.
- (iv) Tehri Hydro Development Corporation (THDC) Ltd played an important role in the planning and conduct of the exercise. Facilities of THDC were extensively used during Coordinating Conference, Table Top Exercise and the Mock Exercise. These facilities can also be used during the actual disaster scene.
- (v) The scenario for the exercise was painted keeping in view the possibility of flushing of water from Tehri Dam in emergent situations and its consequences on the low lying areas of Rishikesh.
- (vi) Participation of all the agencies in the entire process was encouraging.
- (vii) A section of the vulnerable community was also involved as participant who actively participated in the exercise. This helped in making the response activities in more real environment and also in spreading the awareness among the larger populations.
- (viii) There was very good turnout for Table Top Exercise.

- (ix) Participants were observed to be very eager to know about the nuances of disaster response and management.
- (x) Shortcomings observed at the TTE were well taken and acknowledged by all concerned and the same was noted for future improvements.
- (xi) All the stakeholders shared their valuable suggestions and inputs for better synergy and coordination.
- (xii) EOC was activated in Conference Hall of Bhagirathi Bhawan, THDC, Rishikesh.
- (xiii) Staging Areas marked had good space for collection of all the resources.
- (xiv) The wholehearted participation of State DM department, DMMC, THDC and other departments/agencies ensured that the exercise achieved its objectives.
- (xv) The whole exercise was well covered by the print and electronic media which helped in public awareness at large.

## **12. Shortcomings**

- (i) IRS has not been incorporated in the District Disaster Management Plans. Also the officers of administration and other departments are not fully cognizant about IRS.
- (ii) Inventory of all the available resources is required to be included in the respective DDMPs plan.
- (iii) Pre-designated responsibilities are required to be given to the officers/departments for organised and prompt response at the time of disaster.
- (iv) Plan for the evacuation and sheltering the livestock has not been made.
- (v) Participation of volunteers and NGOs was negligent in the whole exercise.
- (vi) Functionaries appointed were not well skilled in communicating through wireless radio sets.

## **13. Suggestions**

- (i) District Disaster Management plans of both the districts should be reviewed and updated regularly and SOPs of all the stakeholders should be included.
- (ii) It should be ensured that the District Disaster Management plan has been circulated to all stakeholders and same has been read and understood by all concerned at the time of Handing/Taking over of charge by each functionary in the department.
- (iii) IRS should be incorporated in Dist Disaster Management plan. Role and functions of IRS entities and emergency support functions must be spelt out clearly in the Plan.
- (iv) Each of the stake-holding Departments/ agencies must prepare SOPs regarding disaster response which should include the specific job descriptions and sequence of actions in r/o each functionary during any such emergency.
- (v) The SOP must delineate in detail, the procedures to be followed in steps, in case of emergency right from mobilisation, operation up to demobilisation and debriefing.
- (vi) Each functionary must be held accountable for the duties expected out of him during any such emergencies. The weak links in any disaster may have a cataclysmic effect in the whole disaster management process.
- (vii) The SOPs must also cater for the redundancies and contingencies that may arise during any such emergency.
- (viii) The procedure of initiation of the disaster management procedure right from the first information about any incident to the declaration of the Emergency by the competent authority, activation of EOC, staging area, cas-evac, evacuation of the population from the affected areas, transport,

evacuation shelters along with all associated functions must be rehearsed regularly (atleast once in six months) so that the actions are set into a drill to be followed every time to rule out any lapse during the actual emergencies.

- (ix) Detail resource inventory listing all available head-wise resources must be brought out in the plan at one place.
- (x) Redundancies for the communication plan must also be catered for as mobile and landline communications invariably fail during any disasters. All the officials should be trained to communicate through radio sets.
- (xi) The relief plan must have predefined relief packets that should include the items according to the needs and eating habits of the affected people. It should also include modesty kit, fuel for cooking, clothes for survival etc.
- (xii) Plan should cater for proper distribution of the relief material as unscrupulous elements may try to take undue benefits and repeatedly claim the relief whereas genuine needs of others may not be addressed.
- (xiii) Outsourcing of the food items from the civil suppliers at the time of disasters may be a good idea but controls and safeguards must be in place to ensure that they are available at the time of need. The same should be delineated in the District Disaster Management Plan.
- (xiv) The organised manpower available with the district like Police, Fire and emergency services must be more sensitised about the threats and its management.
- (xv) The infrastructure and facilities at the IRS entities like the EOC, Staging Area, Incident Command Post and Medical Aid Post should be enhanced for the effective and flawless management of the disaster.
- (xvi) The IRTs should be pre-designated at distt, tahsil and village level so that response can be made very swift and prompt at the time of real disaster.
- (xvii) Districts should activate all available resources in such type of exercises to assess their functionality and feasibility.

#### **14. Feedbacks**

- (i) Overall objectives of the exercise were achieved as it was able to generate a lot of awareness among all the stakeholders and public involved in the Exercise.
  - (ii) Exercise was able to generate much larger awareness about flood disaster and the Incident Response System's efficiency in dealing with disasters of a very large and complex nature.
  - (iii) All the agencies shown great interest and put its best efforts in preparation and in conduct of the mock exercise to make it a success despite of its other engagements and busy schedule.
  - (iv) Efforts were made to keep the exercise as unobtrusive as possible so as to spare the common public any discomfort and to prevent any unnecessary panic from setting in the public.
  - (v) Presence of officers from DM department of the State and DMMC encouraged the active participations of various stakeholders and augmented the coordination of the events in the exercise. They also could themselves check the disaster response systems of both the districts and could guide the responders on different issues.
  - (vi) Such type of exercises should be regularly conducted at each district of Uttarakhand from time to time to make the whole state prepared and disaster resilient.
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