

CHAPTER- 8

RECONSTRUCTION, REHABILITATION AND RECOVERY MEASURES

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RECONSTRUCTION, REHABILITATION, RECOVERY MEASURES AND

General guidelines

The disaster scenario offers a range of opportunities for affected persons to respond to the crisis, how persons respond to a disaster and post disaster aid sets the tone for the transition from disaster to development. After earthquake in Latur, people of that area started to monitor construction works, retrofitting of houses and behaved like community construction watch dogs (IDR, Oxford, 2000).

Disaster management is a multi faceted discipline that needs different mechanisms with diverse methodology. The action plan contains two approaches; 1) short term plan and 2) long term response plans. The district administration-DDMA Central - has to take pre-act. on on these two approaches to tackle a disaster scenario.

8.1 SHORT TERM RESPONSE PLAN

Short-term response plan contains the actions to be taken immediately after a disaster. Once an information has been reached the district EOC or any of the Disaster Managers in the district either from authentic or unauthentic sources, it has to be verified soon for authenticity. Once the information is found correct, it has to be reported to the Incident Commander via fast communication system. The Incident Commander shall take the following actions.

- ❖ Disseminate warning/alert to the potential victims
- ❖ Disseminate information to vertical and horizontal EOCs
- ❖ Disseminate information to vertical and horizontal Administrators and DMTs
- ❖ Declare Disaster based on the severity/vulnerability

8.1.1 Rescue Operations

Immediately after a disaster the Deputy Commissioner (Central) Delhi shall act as the District Magistrate and Incident Commander and take over disaster management. He/she shall coordinate the rescue operations with the help of the Working Group for relief and rehabilitation and the Emergency Support Functions. Alongwith the rescue operations the Incident Commander shall do the following measures:

- ❖ Activate the Incident Command System
- ❖ Call meeting of Crisis Management Group
- ❖ Coordinate the ESFs in disaster management
- ❖ Set up Site/Onsite Operation Centres and activate relief camps
- ❖ Collect preliminary assessment report from the onsite EOCs
- ❖ Activate the pre-contract vendors and collect relief materials for distribution
- ❖ Brief the situation to the Higher authority as well as to the press/media people
- ❖ Ensure basic logistic arrangements for disaster managers and the Operation Centres
- ❖ Mobilize resources/ call assistance from various stakeholders

Besides there are large number of activities to be under taken by the Incident Commander in consultation with the Crisis Management Group which are listed in the Disaster Management Act.

8.1.2 Relief Operations

Once the rescue phase is over, the district administration shall provide immediate relief assistance either in cash or in kind to the victims of the disaster. The DDMA Central shall enter in to pre-contract well in advance and procure materials required for life saving. The office of Deputy Commissioner is responsible for providing relief to the victims of natural & man made disasters like fire, flood, drought, earthquakes, riots, terrorist attacks, accidents etc. The relief is provided as per the following scale fixed by the government:

(i) **Fire and other Accidents (caused by individual or natural calamities):**

- a. Death (Major) : Rs. 2,00,000/- in each case
- b. Death (Minor) : Rs. 1,00,000/- in each case
- c. Serious injury : Rs. 50,000/- in each case
- d. Minor injury : Rs. 10,000/- in each case
- e. Orphaned Children : Rs. 1,00,000/- in each case

(ii) **Bomb Blasts, Communal Riots & other, Terrorist Attacks:**

- a. Death (Major) : Rs. 3,00,000/- in each case
- b. Death (Minor) : Rs. 1,50,000/- in each case
- c. Permanent Incapacitation : Rs. 1,50,000/- in each case
- d. Serious injury : Rs. 1,00,000/- in each case
- e. Minor Injury : Rs. 10,000/- in each case

(iii) a. Animals (source of income/livelihood): Rs. 2,000/- each

- I. Farm Animals : cows, buffaloes, sheeps
- II. Cart Animals : horses, oxen, camel

- a. Rickshaw : Rs. 1,500/- each

(iv) **Damage to residential unit (in riots/fire/natural calamities/ [other than jhuggies]):**

- a. Total Damage : Rs. 50,000/-
- b. Substantial Damage : Rs. 25,000/-
- c. Minor Damage : Rs. 5,000/-

(v) **Damage to uninsured commercial property/commercial articles (in riots/fire/natural calamities/[other than jhuggies]):**

50% of the loss up to a maximum of Rs. 1,00,000/-

(vi) **Damage to jhuggies (in case of riots/fire/etc.)**

Total damage to jhuggies : Rs. 5,000/- in each case
(Rs. Five thousand only)

8.1.3 Rehabilitation

In short term response rehabilitation is the final step. The incident Command System shall be deactivated as the rehabilitation phase is over. Thereafter the normal administration shall take up the remaining reconstruction works in the disaster-affected areas. These activities shall be performed by the Working Group for relief and rehabilitation under the direction of the DDMA.

8.2 LONG TERM RESPONSE PLAN

The long-term response plans are related with Recovery and Reconstruction activities on one side and institutionalizing disaster management in district administration on the other side. The former one is given in detail in the coming chapter. There are Standard Operation Procedures (SOPs) for the Emergency Support Functions. In long term measures the following actions shall be undertaken duly.

- ❖ Constitution of Emergency Support Functions, Disaster Management Teams, Quick Response Teams, Field Response Teams
- ❖ Refresher trainings for all such teams in a regular interval of time and exercise of Mock Drills
- ❖ Continuous awareness/sensitization programmes for the stakeholders and the general Public
- ❖ Getting pre-contract with vendors and merchant establishments to procure relief materials in times of disaster

Most of the Line Departments in the District, Autonomous Bodies and Organizations are part of the Emergency Support Functions. The action plans for ESFs for disaster management are discussed below. The DDMA shall ensure that these actions plans are updated bi annually and practiced through mock drills in the district.

8.2.1 Action Plan for Police-Central Delhi

Response Activation:

- ❖ The Nodal Officer from Delhi Police will activate the Quick Response teams.
- ❖ The Quick Response Teams will be deployed at the Onsite EOCs.
- ❖ As per the information from IMTs, more officers may be sent at site.

Actions to be taken:

- ❖ If felt, cordoning of area to restrict movement of onlookers, vehicular and pedestrian traffic should be done.
- ❖ Quick assessment of law and order situation in affected areas.
- ❖ Prepare updates on the law and order situation every 2-3 hours and brief the Incident Commander.
- ❖ Arrangements for controlling situations like rioting and looting.
- ❖ QRTs will guard property and valuables in affected areas.
- ❖ Control and monitor traffic movement.
- ❖ QRTs will provide diversion of traffic on alternate routes as and when it is necessary.
- ❖ The QRTs will also provide information about traffic flow along various corridors, especially heavy traffic or congested roads.
- ❖ QRTs will communicate to police control rooms, details on the field activities including deployment and reinforcement of staff and resources and communicate nature of additional requirements.
- ❖ Equipments to be brought:
 - ❖ Search Lights
 - ❖ Electric Generators
 - ❖ Crane- Heavy Duty, Fork Type
 - ❖ Recovery Van

- ❖ Stretchers
- ❖ First Aid Kits
- ❖ Vehicles: Mini Buses, heavy truck, light ambulance vans, mobilization trucks
- ❖ Water tanker
- ❖ Any other

8.2.2 Action Plan for Delhi Fire Service

Response Activation:

- ❖ As soon as the Nodal Officer gets information about the disaster, he should reach the EOC.
- ❖ The Quick Response Teams will be deployed at the Onsite EOCs.
- ❖ As per the information from IMT, more officers may be sent at site.

Actions to be taken:

- ❖ At the site, QRTs should contact the local volunteers and local people to gather information about vulnerable areas so that search and rescue operation can take place through a proper channel in heavily dense areas, large buildings, community centres, hotels, hospitals, public buildings and any other area having large gathering.
- ❖ Locate the damaged and collapsed structures and rescue the population buried and trapped in rubble.
- ❖ The injured people should be taken out of damaged buildings etc with utmost care.
- ❖ Special care to women and children groups should be given as they are expected to be more affected and helpless in case of any emergency situation
- ❖ Coordinate with the Transportation ESF if a large number of medical professionals need to be sent to the affected sites and/or a large number of victims need to be transported to health facilities.

Equipments to be brought:

- ❖ Water Tenders
- ❖ Ladder Platforms
- ❖ Haz Mat Van
- ❖ Concrete Cutter
- ❖ Other equipments necessary for Search and Rescue Operations, depends upon need.

8.2.3 Action Plan for Civil Defence & Home Guards

Response Activation:

- ❖ As soon as the Nodal Officer gets information about the disaster, reach the EOC.
- ❖ The Quick Response Teams will be deployed at the three sites.
- ❖ As per the information received from IMT, more officers may be sent at site.

Actions to be taken:

- ❖ Support and coordinate with the Incident Command System of Central Delhi for Law and Order, Search and Rescue and Medical Response and Trauma Counselling functions.
- ❖ Locate the damaged and collapsed structures and rescue the population buried and trapped in rubble.
- ❖ The injured people should be taken out of damaged buildings etc with utmost care.

- ❖ Special care to women and children groups should be given as they are expected to be more affected and helpless in case of any emergency situation.
- ❖ In case of fire, the CD team members should do fire fighting.
- ❖ First Aid should be provided alongwith the members of ESF on Medical Response
- ❖ Demonstrate Search and Rescue.

Equipments to be brought:

1. Extension Ladders
2. Sledge Hammers
3. Lifting Tackles
4. Stretchers
5. Tarpaulins
6. Any other

8.2.4 Action Plan for TRANSCO-Central Delhi

Response Activation:

- ❖ Get the power ESF activated.
- ❖ Nodal Officer of primary agency will call nodal officers of supporting agencies (BSES & TPDDL).
- ❖ As per the information from IMTs, the nodal officer of primary agency will activate the State Quick Response Teams at field level.
- ❖ The Quick response teams will be deployed at the affected site.

Actions to be taken:

- ❖ Team Leader will dispatch emergency repair teams equipped with tools, tents etc
- ❖ Coordination with BSES for any local failures.

Equipments to be brought:

All Equipments required to restore failure in network at stations should be available.

8.2.5 Action Plan for BSES-Central Delhi

Response Activation:

- ❖ As soon as the Nodal Officer gets information about the disaster reach the EOC.
- ❖ The Quick Response Teams will be deployed at the three sites.
- ❖ As per the information received from IMT, more officers may be sent at site.

Actions to be taken:

- ❖ TL will dispatch emergency repair teams equipped with tools, tents and food.
- ❖ Assist hospitals in establishing an emergency supply by assembling generators and other emergency equipments, if necessary.
- ❖ The members of QRTs will establish temporary electricity supplies for other key public and private water systems.
- ❖ The members of QRTs will make arrangements for temporary electricity supplies for transit camps, feeding centres, relief camps and Onsite EOC, District EOC and on access roads to the same.
- ❖ The members of QRTs will establish temporary electricity supplies for relief material go downs.

- ❖ Compile an itemized assessment of damage, from reports made by various electrical receiving centres and sub-centres.
- ❖ Report about all the activities to the head office.

Equipments

All material required for restoration of supply available with the company in Field Offices/Stores.

ACTION PLAN

For effective control and management of a disaster, an action plan and organization shall be prepared by each Circle In-charge (General Manager) alongwith the responsibilities.

Action Plan for emergency management shall consist of the following factors:

1. Responsibility of employees about first information
2. Responsibilities of Emergency Support Function team Manager
3. Responsibilities of various teams constituted to deal with specific emergency requirement
4. Responsibility of BM (D) for "All Clear" signal

8.3 FIRST INFORMATION

The first person who observes/ identifies the hazardous incident shall inform by shouting and going/running to the nearest telephone (but while doing so, he will ensure that he is not entering into an area of hazards) and he will telephone to the following in terms of priority:

1. Nearest Distt.Fire Station & **Disaster Control Room No.-1077**
2. Security Staff
3. Telephone Exchange
4. Shift in Charge

8.4. ESSENTIAL STAFF

Immediately affected or likely to be affected, as decided by the BM (D) efforts will be made to shut down/restore in a safe manner. This work will be carried out by the personnel on duty and essential operators provided. They can do the same without exposing themselves to undue risks.

The following employees will also be required to help in the above works:

- a. Attendants
- b. First aiders
- c. Personnel for emergency engineering works such as providing extra lighting etc.
- d. Personnel for transporting equipment to the incident site from the other parts of the works.
- e. Personnel acting as runners in case there are communication difficulties.
- f. Personnel for manning power station/sub-station entrance, liaison with police to direct emergency vehicles to control traffic leaving the plant and to turn away or make alternate arrangements for visitors and other traffic arriving at the plant.

It is the responsibility of the BM (D) to identify the above essential staff and form a Task Force, which reports at defined locations so that they can be readily contacted. It is also the responsibility of the BM (D) to remove all non-essential staff away from the hazard.

1. RESPONSIBILITIES OF TEAMS

a) Emergency Support Function Team

- Identify source of hazard and try to neutralize/contain it
- Isolate/restore the power and keep it in safe condition
- Organize all support services like operation of fire tender, police, security etc.
- Any other responsibility as decided by Team Leader, looking into the circumstances at the time of the disaster.

b) Maintenance Team

- Attend to all emergency maintenance jobs on priority basis
- Take steps to contain or reduce the level of hazard that can create a disaster
- Organize additional facilities as desired
- Any other responsibility as decided by Team Leader, looking into the circumstances at the time of the disaster

c) Security Team

- Man all the gates
- Bar entry of unauthorized persons and non-essential staff
- Permit with minimum delay the entry of all authorized personnel and outside agencies, vehicles, etc. who have to assist
- Allow ambulances/evacuation vehicles through without normal checks
- Any other responsibility as decided by Team leader, looking into the circumstances at the time of the disaster.

d) Administrative Team

- Rescue casualties on priority basis
- Transport casualties to first aid post, safe places or medical centers
- Account for personnel
- Help in search for missing personnel
- Pass information to the kith and kin of fatal and injured persons
- Make all arrangements regarding transportation
- Any other responsibility as decided by Team Leader, looking into the circumstances at the time of the disaster.

e) Distt. Safety Committee Team

- Arrange required safety requirement
- Record accidents
- Collect and preserve evidence in connection with accident, guide authorities on all safety related issues
- Any other responsibility as decided by Team Leader, looking into the circumstances at the time of the disaster

f) Medical Team

- Arrange first aid material/stretchers and reach accident site quickly
- Arrange for immediate medical attention
- Arrange for sending the casualties to various hospitals and nursing homes etc.
- Ask specific medical assistance from outside including through Medical Specialists in consultation with the BM (D)

- Any other responsibility as decided by Team Leader, looking into the circumstances at the time of the disaster.

Action to be taken by BSES

Flood

- a) Disconnect/Isolate the supply.
- b) Inform the disaster control room (Govt.)-Tel. No. **1077** with the following information:
 - No. of effected persons.
 - Location and Time.
 - Installation affected.Also inform BSES.
 - Circle Control
 - System Control
 - Circle Head (O&M)

Cyclone

- a) Disconnect/Isolate the supply.
- b) Inform the disaster control room (Govt.)-Tel. No. 1077 with the following information
 - No. of effected persons.
 - Location and Time.
 - Installation affected.Also inform BSES.
 - Circle Control
 - System Control
 - Circle Head (O&M)

Earthquake

- a) Disconnect/Isolate the supply.
- b) Inform the disaster control room (Govt.)-Tel. No. 1077
With the following information:
 - No. of effected persons.
 - Location and Time.
 - Installation affected.Also inform BSES.
 - Circle Control
 - System Control
 - Circle Head (O&M)

Fire

- a) Disconnect the supply and inform the following
 - Fire Control Room, Tel No.-101
 - Police Control Room, Tel No.-100
 - Govt. Control Room (Disaster), Tel No.-1077
with the following details
 - No. of effected persons.
 - Location and Time.
 - Installation affected.Also inform BSES.
 - Circle Control

- System Control
- Circle Head (O&M)

Terrorist Activity

Inform Police Control at Tel No. 100 alongwith the following details-

- Location.
- No. of Effected Persons.
- Nature of Attack.

Also Inform

- Govt. Disaster Control Room at 1077
- Try to save yourself and Government Property.
- Guide the escape route to be effected persons if conversant

8.5 Action Plan for MTNL-Central Delhi

Goal: The MTNL is primarily responsible for restoration of communication facilities. The MTNL should ensure the smooth flow of information that can cater to the outreach in a time-sensitive manner at state level in response efforts.

Response Activation:

- ❖ Soon after receiving information about disaster (from any source), Nodal Officer will contact State/District Emergency Operations Centre.
- ❖ The Nodal Officer from MTNL will activate the Quick Response Teams
- ❖ The Quick Response Teams will be deployed at the three incident sites.
- ❖ As per the information from Incident Management Team, more teams may be deployed at affected sites.

Actions to be taken:

- ❖ Communicate situation to support agencies (Tata, Airtel, Hutch, Idea, NIC and HAM etc.) and request for detailed information on the status of equipment and infrastructure damage in the affected area(s).
- ❖ Launch assessment mission to understand better the nature of damage to telecom services and network.
- ❖ Ensure possible arrangements for establishing reliable and appropriate network.
- ❖ Work out a plan of action for private telecom companies and convene a meeting to discuss and finalize the modalities.
- ❖ Compile and communicate Action Taken Report to District and State Authorities.
- ❖ New numbers and details of contact persons to be communicated to Emergency Operations Centre (District/State).
- ❖ Mobile exchanges should be deployed as alternative mode of communication for authorities and general public.
- ❖ Establish telephone facilities for the public and information on this should be announced through media.
- ❖ Monitor the situation and arrange for emergency staff required to operate systems established.
- ❖ Inform district/state authorities on debris clearance of the work required
- ❖ Initiate temporary rehabilitation work required.
- ❖ Launch rehabilitation work and arrange for repairs and relocation, if required.
- ❖ Make available various types of equipment/material/ technical manpower and services, if required.

Equipments to be brought:

- ❖ Emergency Communication Van with GSM and CDMA services

- ❖ Other necessary equipments to restore communication network / set-up alternative emergency communication

8.6 Action Plan for Private Mobile Operators

Goal: The MTNL is primarily responsible for restoration of communication facilities. The private operators should ensure the smooth flow of information that can cater to the outreach in a time-sensitive manner at state level in response efforts.

Response Activation:

- ❖ Soon after receiving information about the calamity (from any source), Nodal Officer will contact Team Leader from MTNL.
- ❖ The Nodal Officer will activate the Quick Response Teams
- ❖ The Quick Response Teams will be deployed at the three incident sites.
- ❖ As per the information from Incident Management Team, more teams may be deployed at affected sites.

Actions to be taken:

- ❖ Communicate situation to MTNL and arrange for detailed information on the status of equipment and infrastructure damage in the affected area(s).
- ❖ Launch assessment mission to understand better the nature of damage to telecom services and network.
- ❖ Ensure possible arrangements for establishing reliable and appropriate network.
- ❖ Work out a plan of action for restoration and convene a meeting to discuss and finalize the modalities.
- ❖ Compile and communicate Action Taken Report to MTNL.
- ❖ New numbers and details of contact persons to be communicated to Emergency Operations Centre (District/State).
- ❖ Mobile exchanges should be deployed as alternative mode of communication for authorities and general public.
- ❖ Establish telephone facilities for the public and information on this should be announced through media.
- ❖ Monitor the situation and arrange for emergency staff required to operate systems established.
- ❖ Inform district/state authorities on debris clearance of the work required
- ❖ Initiate temporary rehabilitation work required.
- ❖ Launch rehabilitation work and arrange for repairs and relocation, if required.
- ❖ Make available various types of equipment/material/ technical manpower and services, if required.

Equipments to be brought:

- ❖ Emergency Communication Van with GSM and CDMA services
- ❖ Other necessary equipments to restore communication network / set-up alternative emergency communication

8.7 Action plan for HAM radio operators

- ❖ Inform other HAM clubs, individuals from other parts of Delhi
- ❖ HAM radio operators, through their association, call active members to set up a HAM communication system
- ❖ Coordination mechanisms to be shared with concerned authorities
- ❖ Setup alternative communication network till the main communication linkages restored

8.8 Action Plan for Municipal Corporation

Actions to be taken

- ❖ MUNICIPAL CORPORATION will bring debris of heavy RCC structures (having beams/columns) and put dummies beneath the debris. This will facilitate demonstration of search & rescue operations. Soon after search and rescue team leave the site, MUNICIPAL CORPORATION will mobilize equipments for debris clearance
- ❖ MUNICIPAL CORPORATION will assume main role in Equipment support, debris and road clearance, on receiving the intimation of the disaster from State EOC.
- ❖ MUNICIPAL CORPORATION will coordinate with the supporting agency's officers to mobilize equipments from the ware houses
- ❖ The respective supporting agencies will contact their respective personal to move the equipments to central warehouse
- ❖ The equipments like JCB, concrete cutters identified as per the need will be transported to the site.
- ❖ On receiving intimation on the intensity of the damages of structure, the nodal officer will make an assessment on of the damages of roads and structures reported at the site and surrounding areas
- ❖ The Supporting Agency's Nodal Officers will call for personal to immediately start debris clearance operation to enable movement to the affected site.
- ❖ A review of the current situation is taken up by the nodal agency to update the support agencies to delegate their respective personnel to take precautionary measure to plan de-routes for the transportation ESF's to be operational
- ❖ All supporting agencies will inspect the road/rail network and structures within the disaster site and surrounding.
- ❖ MUNICIPAL CORPORATION will also ensure proper corpse disposal and post-mortem by coordinating with ESF on medical response.
- ❖ Assessment of damage (locations, No. of structures damaged, severity of damage)
- ❖ The QRTs will be deployed at the affected site.
- ❖ Enlisting the types of equipment as compiled from resource inventory required for conducting the debris clearance
- ❖ The QRTs will report the situation and the progress in response activities to the respective EOCs.
- ❖ Undertake construction of temporary roads to serve as access to temporary transit and relief camps, and medical facilities for disaster victims.
- ❖ Undertake repair of all paved and unpaved road surfaces including edge metalling, pothole patching and any failure of surface, foundations in the affected areas by maintenance engineer's staff and keep monitoring their conditions.
- ❖ Ensure a critical number of medical professionals to reach the site including specialists from outside the state.
- ❖ If temporary living arrangements are being made from the affected populace, the MUNICIPAL CORPORATION must ensure high standards of sanitation in settlements in order to prevent the multiplicity of the disaster.
- ❖ It should also ensure the provision of medicine and other medical facilities required at the disaster site and the hospital health centres catering to disaster victims.
- ❖ In case of orthopaedic care required in disasters like earthquakes the immediate response would have to be implemented by a follow up organization schedule for a majority of the patients in/ near their place of residence.
- ❖ MUNICIPAL CORPORATION should ensure setting up of temporary information centres at MUNICIPAL CORPORATION hospitals with the help of ESF on help lines and warning dissemination.

- ❖ MUNICIPAL CORPORATION will coordinate, direct, and integrate state level response to provide Equipments support, relief camps establishment, and sanitation health assistances.
- ❖ Mobilizes different modes of transportation e.g. trucks, etc to be put on stand-by.
- ❖ Assist timely re-establishment of the critical transportation links.
- ❖ Establish temporary electricity supplies for relief material go downs and relief camps.
- ❖ Compile an itemized assessment of damage, from reports made by various receiving centres and sub-centres.

MUNICIPAL CORPORATION Disaster Management Centers:-

There are three MUNICIPAL CORPORATION Disaster Management Centres equipped with heavy equipments required for debris clearance catering to Central District. These DM centers are located at:-

1. Bela Road
2. Jhandewalan
3. Karol Bagh

Equipments to be brought:

- ❖ JCB, concrete breakers, cranes, Grader, Bulldozers, Gas Cutter, Jack Hammer, Tipper, Folkanes, Dumper, Aerometric Hammer for debris/road clearance, supporting rescue operations.
- ❖ Vehicles (Trucks)
- ❖ Earth movers, rescue equipments
- ❖ Mobile medical vans
- ❖ Other disaster management related equipments

8.9 Action Plan for PWD

Actions to be taken

- ❖ The above agencies will bring debris of heavy RCC structures (having beams/columns) and put dummies beneath the debris. This will facilitate demonstration of search & rescue operations. Soon after search and rescue team leave the site, will mobilize equipments for debris clearance
- ❖ Assume role in Equipment support, debris and road clearance, on receiving the intimation of the disaster from State EOC/Nodal Officer of MUNICIPAL CORPORATION
- ❖ Coordinate with the MUNICIPAL CORPORATION officers to mobilize equipments from the ware houses
- ❖ Contact respective personal to move the equipments to central warehouse
- ❖ The equipments like JCB, concrete cutters identified as per the need will be transported to the site.
- ❖ On receiving intimation on the intensity of the damages of structure, the nodal officer will make an assessment on of the damages of roads and structures reported at the site and surrounding areas
- ❖ The nodal officers will call for personal to immediately start debris clearance operation to enable movement to the affected site.
- ❖ A review of the current situation should be taken up by the nodal agency to update the support agencies to delegate their respective personnel to take precautionary measure to plan de-routes for the transportation ESFs to be operational
- ❖ All supporting agencies will inspect the road/rail network and structures within the disaster site and surrounding.

- ❖ Ensure proper corpse disposal and post mortem by coordinating with ESF on medical response.
 - Assessment of damage (locations, no. of structures damaged, severity of damage)
 - The QRTs will be deployed at the affected site.
 - Enlisting the types of equipment as compiled from resource inventory required for conducting the debris clearance
 - The QRTs will report the situation and the progress in response activities to the respective EOCs.
 - Undertake construction of temporary roads to serve as access to temporary transit and relief camps, and medical facilities for disaster victims.
 - Undertake repair of all paved and unpaved road surfaces including edge metalling, pothole patching and any failure of surface, foundations in the affected areas by maintenance engineer's staff and keep monitoring their conditions.
- ❖ Ensure a critical number of medical professionals to reach the site including specialists from outside the state.
- ❖ If temporary living arrangements are being made from the affected populace, the agencies must ensure high standards of sanitation in settlements in order to prevent the multiplicity of the disaster.
- ❖ Coordinate, direct, and integrate response to provide Equipments support, relief camps establishment, and sanitation health assistances.
- ❖ Mobilizes different modes of transportation e.g. Trucks, etc to be put on stand-by.
- ❖ Assist timely re-establishment of the critical transportation links.
- ❖ Establish temporary electricity supplies for relief material go downs and relief camps.
- ❖ Compile an itemized assessment of damage, from reports made by various receiving centres and sub-centres.

Equipments to be brought

- ❖ JCB, concrete breakers, cranes, Grader, Bulldozers, Gas Cutter, Jack Hammer, Tipper, Folkanes, Dumper, Aeromatic Hammer for debris / road clearance, supporting rescue operations.
- ❖ Vehicles (Trucks), Earth movers, rescue equipments, Mobile medical vans
- ❖ Other disaster management related equipments.

8.10 Action Plan for Directorate of Health Services

Response Activation:

- ❖ Nodal Officer will call nodal officers of supporting agencies.
- ❖ In coordination with the transportation ESF, it will ensure a critical number of medical professionals to reach the sites including specialists.
- ❖ If temporary living arrangements are being made from the affected populace, must ensure high standards of sanitation in settlements in order to prevent the multiplicity of the disaster.
- ❖ Also ensure the provision of medicine and other medical facilities required at the disaster site and the hospital health centres catering to disaster victims.
- ❖ In case of orthopaedic care required, immediate response would have to be implemented by a follow up treatment schedule for a majority of the patientsq in/ near their place of residence.

- ❖ Trained professionals should be mobilized by psychosocial support.
- ❖ Ensure setting up of temporary information centres at hospitals with the help of ESF on help lines and warning dissemination.
- ❖ Coordinate, direct, and integrate state level response to provide medical and sanitation health assistances.

Actions to be taken:

- ❖ Ready all hospitals (including private hospitals) for managing large no. of casualties and severely injured population.
- ❖ Sufficient stock of required medicines, vaccines, drugs, plasters, syringes, etc.
- ❖ Provide systematic approach to patient care (Mass Casualty Management)
- ❖ Triage done to determine who needs to be taken to a medical facility on a priority basis and who can be treated on-site. (CATS, DHS, CGHS)
- ❖ First-aid provided as required (CATS, DFS, CD, Red Cross, St. Johns)
- ❖ Patients Stabilized before transport (CATS, DHS)
- ❖ Patients transported to nearest available medical facility having the required facilities (CATS, CD, St. Johns)
- ❖ Trauma counselling provided 15 organizations and their relatives at the site and in the hospital
- ❖ In the hospital emergency department, triage carried out again to prioritize treatment, and appropriate care provided
- ❖ Maintain patient tracking system to keep record of all patients treated
- ❖ Deploy mobile hospitals as needed
- ❖ Arrange for additional blood supply; organize blood donation camp for additional blood requirement.
- ❖ Provide for sending additional medical personnel equipped with food, bedding, and tents.
- ❖ Send vehicles and any additional medical equipment.
- ❖ QRTs will report the situation and the progress on action taken by the team to the respective EOCs
- ❖ QRTs quickly assess type of injuries, no. of people affected, and possible medical needs
- ❖ QRTs will ensure timely response to the needs of the affected victims.
- ❖ Establish health facility and treatment centres at disaster sites.
- ❖ The district civil surgeon with district/State control room should coordinate the provision of medical services.
- ❖ Procedures should be clarified between
 - ❖ Peripheral hospitals
 - ❖ Private hospitals
 - ❖ Blood banks
 - ❖ General hospitals and
- ❖ Health services established at transit camps, relief camps and affected villages.
- ❖ QRTs should maintain check posts and surveillance at each railway junction, ST depots and all entry and exit points from the affected area, especially during the threat or existence of an epidemic.

Equipments to be brought

- ❖ Mobile medical vans (Clinics) with paramedical staff as well
- ❖ Mobile radiology units, pathology test arrangements.

- ❖ Vehicles for carrying severely injured
- ❖ Stretchers, life saving drugs, blood etc.
- ❖ Other resources required during emergency for setting up medical camps