

CHAPTER-VI

ROLE OF VARIOUS DEPARTMENTS/AGENCIES IN DISASTER MANAGEMENT

6.1 General Preparedness:

Each Department and Govt. agency involved in Disaster Management and mitigation will:

- Designate a Nodal officer for emergency response and will act as the contact person for that department / agency.
- Ensure establishment of safe two-way communication with the District and other emergency control rooms and within the organisation
- Work under the overall supervision of the district administration during emergencies.
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6.2 Agriculture

Prevention Activities:

- Awareness generation regarding various plant diseases, alternate cropping practices in disaster-prone areas, Crop Insurance, provision of credit facilities, proper storage of seeds, etc.
- Hazard area mapping (identification of areas endemic to pest infections, drought, flood, and other hazards)
- Develop database village-wise, crop-wise, irrigation source wise, insurance details, credit facilities, etc.
- Regular monitoring at gram panchayat level; the distribution and variation in rainfall. Prepare the farmers and department officers to adopt contingency measures and
- take up appropriate course of action corresponding to the different emerging scenarios.
- Detail response manuals to be drawn up for advising the farmers for different types of disasters, e.g., rain failure in July or September & development of a dynamic response plan taking into account weekly rainfall patterns.
- Develop IEC materials to advise the farming communities on cropping practices and precautionary measures to be undertaken during various disasters
- Improving irrigation facilities, watershed management, soil conservation and other soil, water and fertility management measures keeping in mind the local agro-climatic conditions and the proneness of the area to specific hazards
- Promotion of alternative crop species and cropping patterns keeping in mind the vulnerability of areas to specific hazards
- Surveillance for pests and crop diseases and encourage early reporting
- Encourage promotion of agro service outlets/enterprise for common facilities, seed and agro input store and crop insurance

Preparedness Activities before disaster seasons

- Review and update precautionary measures and procedures and especially ascertain that adequate stock of seeds and other agro inputs are available in areas prone to natural calamities
- Review the proper functioning of rain gauge stations, have stock for immediate replacement of broken / non-functioning gadgets/ equipments, record on a daily basis rainfall data, evaluate the variation from the average rainfall and match it with the rainfall needs of existing crops to ensure early prediction of droughts

Response Activities:

- Management of control activities following crop damage, pest infestation and crop

disease to minimise losses

- Collection, laboratory testing and analysis of viruses to ensure their control and eradication
- Pre-positioning of seeds and other agro inputs in strategic points so that stocks are readily available to replace damage caused by natural calamities
- Rapid assessment of the extent of damage to soil, crop, plantation, irrigation systems, drainage, embankment, other water bodies and storage facilities and the requirements to salvage, re-plant, or to compensate and report the same for ensuring early supply of seeds and other agro inputs necessary for re-initiating agricultural activities where crops have been damaged
- Establishment of public information centres with appropriate and modern means of communication, to assist farmers in providing information regarding insurance, compensation, repair of agro equipments and restarting of agricultural activities at the earliest

Recovery Activities

- Arrange for early payment of compensation and crop insurance dues
- Facilitate provision of seeds and other agro inputs
- Promotion of drought and flood tolerant seed varieties
- Review with the community, the identified vulnerabilities and risks for crops, specific species, areas, which are vulnerable to repetitive floods, droughts, other natural hazards, water logging, increase in salinity, pest attacks etc. and draw up alternative cropping plans to minimise impacts to various risks.
- Facilitate sanctioning of soft loans for farm implements
- Establishment of a larger network of soil and water testing laboratories
- Establishment of pests and disease monitoring system
- Training in alternative cropping techniques, mixed cropping and other agricultural practices which will minimise crop losses during future disasters

6.3. Health Department

6.3. 1 Disaster Events Prevention Activities:

- Assess preparedness levels at District and Taluk levels
- Identification of areas endemic to epidemics and natural disasters
- Identification of appropriate locations for testing laboratories
- Listing and networking with private health facilities
- Developing a network of volunteers for blood donation with blood grouping data
- Strengthening of disease surveillance, ensuring regular reporting from the field level workers (ANMs etc) and its compilation and analysis at the PHC and District levels, on a weekly basis (daily basis in case of an epidemic or during natural disasters), forwarding the same to the State Disease Surveillance Cell .
- Formation of adequate number of mobile units with trained personnel, testing facilities, communication systems and emergency treatment facilities
- Identification of locations in probable disaster sites for emergency operation camps
- Awareness generation about various infectious diseases and their prevention
- Training and IEC activities
- Training of field personnel, Traditional Birth Attendants, community leaders, volunteers, NGOs in first aid, measures to be taken to control outbreak of epidemics during and after a disaster, etc.
- Arrangement of standby generators for every hospitals
- Listing of vehicles, repair of departmental vehicles that will be requisitioned during emergencies for transport of injured

Preparedness Activities before Disaster Seasons

- For heat wave: preparation and distribution of IEC materials, distribution of ORS and other life-saving drugs, training of field personnel on measures to be taken for management of patients suspected to be suffering from heatstroke;
- For flood and cyclone: Assessment and stock piling of essential medicines, anti snake venom, halogen tablets, bleaching powders, ORS tablets, Pre-positioning of mobile units at vulnerable & strategic points

Response activities:

- Stock piling of life-saving drugs, de-toxicants, anaesthesia, Halogen tablets in vulnerable areas
- Strengthening of drug supply system
- Situational assessment and reviewing the status of response mechanisms in known vulnerable pockets
- Ensure adequate availability of personnel in disaster sites
- Review and update precautionary measures and procedures, and apprise the personnel who will be implementing those.
- Sanitation
- Dispensing with post-mortem activities during L1, L2 and L3 when the relatives and/or the competent authority is satisfied about cause of death
- Disinfections of water bodies and drinking water sources.
- Immunization against infectious diseases
- Ensure continuous flow of information

Recovery Activities

- Continuation of disease surveillance and monitoring
- Continuation of treatment, monitoring and other epidemic control activities till the situation is brought under control and the epidemic eradicated
- Trauma counselling
- Treatment and socio-medical rehabilitation of injured or disabled persons
- Immunisation and nutritional surveillance
- Long term plans to progressively reduce various factors that contribute to high level of vulnerability to diseases of population affected by disasters

6.3.2 Epidemics**Preventive Activities:**

- Supply of safe drinking water, water quality monitoring and improved sanitation
- Vector Control programme as a part of overall community sanitation activities
- Promotion of personal and community latrines
- Sanitation of sewage and drainage systems
- Development of proper solid waste management systems
- Surveillance and spraying of water bodies for control of malaria
- Promoting and strengthening Primary Health Centres with network of paraprofessionals to improve the capacity of surveillance and control of epidemics
- Establishing testing laboratories at appropriate locations to reduce the time taken for early diagnosis and subsequent warning
- Establishing procedures and methods of coordination with the Health Department, other local authorities/departments, NGOs to ensure that adequate prevention and preparedness measures have been taken to prevent and /or minimise the probable outbreak of epidemics.
- Identification of areas prone to certain epidemics and assessment of requirements to control and ultimately eradicate the epidemic.
- Identification of appropriate locations and setting up of site operation camps for combating epidemics
- Collection and analysis of the data at regular intervals to assess epidemiological monitoring and improvement in the surveillance and monitoring systems
- Identifying and making prior provisions for emergency accommodations for auxiliary staff from outside, if required
- Planning for making prior arrangement for early transfer of patients who need specialised care/treatment

Response Activities:

- Disinfection of water sources
- Opening up of site operation camps in the affected areas
- Immunisation and Quarantine, if necessary
- Early transfer of patients who need specialised care/treatment

- Establishment of public information centres with appropriate and modern means of communication, to assist providing information to patients, their families, other people living in epidemic affected areas regarding vaccination, Do's and Don'ts treatment facilities, etc.
- Monitoring of water and food quality and disposal of waste in transit and relief camps, feeding centres and affected areas
- Regular reporting to the control rooms
- Review and documentation, sharing of experience and lessons learnt
- Infrastructure and human resource development

6.4 Animal Health:

Prevention Activities:

- Awareness generation regarding various animal disease and their prevention
- Early reporting of animal disease
- Listing of animal population with category
- Stock piling of emergency medicines and medical equipments
- Listing and identification of vehicles to be requisitioned for transport of injured animals
- Vaccination of the animals and identification of campsites in the probable sites
- Promotion of animal insurance
- Tagging of animals
- Arrangement of standby generators for veterinary hospitals
- Provision in each hospital for receiving large number of livestock at a time
- Training of community members in carcasses disposal

Preparedness activities before disaster seasons

- Stock piling of water, fodder and animal feed
- Pre-arrangements for tie-up with fodder supply units
- Stock-piling of surgical packets
- Construction of mounds for safe shelter of animals.
- Identification of various water sources to be used by animals in case of prolonged hot and dry spells
- Training of volunteers & creation of local units for carcass disposal
- Municipalities/Gram Panchayats/ Taluk Panchayat to be given responsibility for removing animals likely to become health hazards

Response Activities:

- Eradication and control of animal diseases, treatment of injured animals
- Protection of abandoned and lost cattle
- Supply of medicines and fodder to affected areas
- Ensure adequate availability of personnel and mobile team
- Disposal of carcasses ensuring proper sanitation to avoid outbreak of epidemics
- Establishment of public information centre with a means of communication, to assist in providing an organised source of information.
- Mobilising community participation for carcass disposal

Recovery Activities:

- Assess losses of animals assets and needs of persons and communities
- Play a facilitating role for early approval of soft loans for buying animals and ensuring insurance coverage and disaster-proof housing or alternative shelters/mounds for animals for future emergencies
- Establishment of animal disease surveillance system

6.5 Water Supplies and Sanitation (Public Work and Engineering & Rural Water

Supply & Sanitation):**Prevention Activities:**

- Provision of safe water to all habitats
- Clearance of drains and sewerage systems, particularly in the urban areas

Preparedness Activities for disaster seasons

- Prior arrangement of water tankers and other means of distribution and storage of water
- Prior arrangement of stand by generators
- Adequate prior arrangements to provide water and halogen tablets at identified sites to used as relief camps or in areas with high probability to be affected by natural calamities
- Raising of tube-well platforms, improvement in sanitation structures and other infrastructural measures to ensure least damages during future disasters
- Riser pipes to be given to villagers

Response Activities:

- Disinfections and continuous monitoring of water bodies
- Ensuring provision of water to hospitals and other vital installations
- Provision to acquire tankers and establish other temporary means of distributing water on an emergency basis
- Arrangement and distribution of emergency tool kits for equipments required for dismantling and assembling tube wells, etc.
- Carrying out emergency repairs of damaged water supply systems
- Disinfection of hand pumps to be done by the communities through prior awareness activities & supply of inputs

Recovery Activities:

- Strengthening of infrastructure
- Review and documentation
- Sharing of experiences and lessons learnt
- Training to staff
- Development of checklists and contingency plans

6.6 Police:**Prevention Activities:**

- Keep the force in general and fighting fit for search, rescue, evacuation and other emergency operations at all times through regular drills
- Procurement and deployment of modern emergency equipments while modernising existing infrastructure and equipments for disaster response along with regular training and drills for effective handling of these equipments
- Focus on better training and equipments for all types of disasters, e.g. diving equipments
- Ensure that all communication equipments including wireless are regularly functioning and deployment of extra wireless units in vulnerable pockets
- Keeping close contact with the District Administration & Emergency Officer
- Involvement of the local home guard units in response planning activities and during the preparation of the annual contingency plans to ensure logistics and other support to police forces during emergencies

Response Plan:

- Security arrangements for relief materials in transit and in camps etc.
- Senior police officers to be deployed in control rooms at State & district levels during L1 level deployment onwards
- Deploy personnel to guard vulnerable embankments and at other risk points

- Arrangement for the safety
- Coordinate search, rescue and evacuation operations in coordination with the administration
- Emergency traffic management
- Maintenance of law and order in the affected areas
- Assist administration in taking necessary action against hoarders black marketers etc.

6.7 Home Guards

Prevention Activities:

- Organise training programmes on first aid, search, rescue and evacuation
- Preparation and implementation of first aid, search and rescue service plans for major public events in the State
- Remain fit and prepared through regular drills and exercises at all times.

Response Activities

- Act as support agency for provision of first aid, search and rescue services to other emergency service agencies and the public
- Act as support agency for movement of relief
- Triage of casualties and provision of first aid and treatment
- Work in coordination with medical assistance team
- Help the Police for traffic management and law and order

6.8 Fire Services:

Prevention Activities:

- Development /enforcement of relevant legislations and regulations to enhance adoption of fire safety measures
- Modernisation of fire-fighting equipments and strengthening infrastructure
- Identification of pockets, industry, etc. which highly susceptible to fire accidents or areas, events which might lead to fires, building collapse, etc. and educate people to adopt safety measures. Conduct training and drills to ensure higher level of prevention and preparedness
- Building awareness in use of various fire protection and preventive systems
- Training the communities to handle fire emergencies more effectively
- VHF network for fire services linked with revenue & police networks
- Training of masons & engineers in fire-proof techniques
- Making clearance of building plans by fire services mandatory

Response Activities:

- Rescue of persons trapped in burning, collapsed or damaged buildings, damaged vehicles, including motor vehicles, trains and aircrafts, industries, boilers and pressure vessels, trenches and tunnels
- Control of fires and minimising damages due to explosions
- Control of other dangerous or hazardous situations such as oil, gas and hazardous materials spill
- Protection of property and the environment from fire damage
- Support to other agencies in the response to emergencies
- Investigation into the causes of fire and assist in damage assessment

6.9 Civil Supplies:

Preventive Activities

- Construction and maintenance of storage godowns at strategic locations
- Stock piling of food and essential commodities in anticipation of disaster
- Take appropriate preservative methods to ensure that food and other relief stock are not

damaged during storage, especially precautions against moisture, rodents and fungus infestation.

Response Activities

- Management of procurement
- Management of material movement
- Inventory management

Recovery Activities

- Conversion of stored, unutilised relief stocks automatically into other schemes like Food for Work. Wherever, it is not done leading to damage of stock, it should be viewed seriously

6.10 Public Works/ZP Engineering Departments

Preventive Activities

- Keep a list of earth moving and clearing vehicles / equipments (available with Govt. Departments, PSUs, and private contractors, etc.) and formulate a plan to mobilise those at the earliest.
- Inspection and emergency repair of roads/ bridges, public utilities and buildings

Response Activities

- Clearing of roads and establish connectivity. Restore roads, bridges and where necessary make alternate arrangements to open the roads to traffic at the earliest.
- Mobilisation of community assistance for clearing blocked roads
- Facilitate movement of heavy vehicles carrying equipments and materials
- Identification and notification of alternative routes to strategic locations
- Filling of ditches, disposal of debris, and cutting of uprooted trees along the road
- Arrangement of emergency tool kit for every section at the divisional levels for activities like clearance (power saws), debris clearance (fork lifter) and other tools for repair and maintenance of all disaster response equipments

Recovery Activities:

- Strengthening and restoration of infrastructure with an objective to eliminate the factor(s) which caused the damage
- Review and documentation
- Sharing of experiences and lessons learnt
- Training to staff
- Development of checklists and contingency plans

6.11 Energy/Power:

Prevention Activities:

- Identification of materials/tool kits required for emergency response
- Ensure and educate the minimum safety standards to be adopted for electrical installation and equipments and organise training of electricians accordingly
- Develop and administer regulations to ensure safety of electrical accessories and electrical installations
- Train and have a contingency plan to ensure early electricity supply to essential services during emergencies and restoration of electric supply at an early date
- Develop and administer code of practice for power line clearance to avoid electrocution due to broken / fallen wires.
- Strengthen high-tension cable towers to withstand high wind speed, flooding and earthquake, modernise electric installation, strengthen electric distribution system to ensure minimum damages during natural calamities
- Conduct public/industry awareness campaigns to prevent electric accidents during normal times and during and after a natural disaster

Response Activities:

- Disconnect electricity after receipt of warning
- Attend sites of electrical accidents and assist in undertaking damage assessment
- Standby arrangements to ensure temporary electricity supply
- Prior planning & necessary arrangements for tapping private power plants during emergencies to ensure uninterrupted power supply to the District Administration, Police Headquarters, All India Radio, Doordarshan, hospitals, medical colleges, District Control Rooms and other vital emergency response agencies.
- Inspection and repair of high tension lines /substations/transformers/poles etc
- Ensure the public and other agencies are safeguarded from any hazards, which may have occurred because of damage to electricity distribution systems
- Restore electricity to the affected area as quickly as possible
- Replace / restore of damaged poles/ salvaging of conductors and insulators

6.12 Water Resources Department:**Prevention Activities:**

- Assess preparedness level
- Annual assessment of danger levels & wide publicity of those levels
- Identify flood prone rivers and areas and activate flood monitoring mechanisms
- Provide water level gauge at critical points along the rivers, dams and tanks
- Identify and maintain of materials/tool kits required for emergency response
- Stock-pile of sand bags and other necessary items for breach closure at the Panchayat level

Response Activities:

- Monitoring flood situation
- Dissemination of flood warning
- Ensure accurate dissemination of warning messages naming GPs & Taluk with details of flow & likely damage
- Monitoring and protection of irrigation infrastructures
- Inspection of bunds of dams, irrigation channels, bridges, culverts, control gates and overflow channels,
- Inspection and repair of pumps, generator, motor equipments, station buildings
- Community mobilisation in breach closure

Recovery Activities:

- Strengthening of infrastructure and human resources
- Review and documentation
- Sharing of experiences and lessons learnt
- Training of staff
- Development of checklists and contingency plans

6.13 Fisheries**Prevention Activities**

- Registration of boats and fishermen
- Building community awareness on weather phenomena and warning system especially on Do's & Don'ts on receipt of weather related warnings
- Assist in providing life saving items like life jackets, hand radios, etc.
- Certifying the usability of all boats and notifying their carrying capacities
- Capacity building of traditional fishermen and improvisation of traditional boats which can be used during emergencies
- Train up young fishermen in search & rescue operation and hire their services during emergency.

Response Activities

- Ensure warning dissemination to fishing communities living in vulnerable pockets
- Responsible for mobilising boats during emergencies and for payment of wages to boatmen hired during emergencies
- Support in mobilisation and additional deployment of boats during emergencies
- Assess the losses of fisheries and aquaculture assets and the needs of persons and communities affected by emergency

Recovery Activities

- Provide compensations and advice to affected individuals, community
- Plan for rehabilitation in the long run of the fisher folk including resettlement, insurance, better boats, nets, etc., improved communication system as a part of the communication hub for warning dissemination, especially for marine fishermen and fishing communities residing in high-risk areas

6.14 Forest Department

Prevention activities

- Promotion of shelter belt plantation
- Publishing for public knowledge details of forest cover, use of land under the forest department, the rate of depletion and its causes
- Keep saws (both power and manual) in working conditions
- Provision of seedling to the community and encouraging plantation activities, promoting nurseries for providing seedlings in case of destruction of trees during natural disasters
- IEC activities for greater awareness regarding the role of trees and forests for protection during emergencies and also to minimise environmental impact which result as a result of deforestation like climate change, soil erosion, etc.
- Increasing involvement of the community, NGOs in plantation, protection and other forest protection, rejuvenation and restoration activities.
- Plan for reducing the incidence, and minimise the impact of forest fire

Response Activities

- Assist in road clearance
- Provide of tree cutting equipments
- Units for tree cutting and disposal to be put under the control of Collector during LI
- Provide of building materials such as bamboos etc for construction of shelters

Recovery Activities

- Take up plantation to make good the damage caused to tree cover

6.15 Transport Department:

Prevention Activities

- Listing of vehicles which can be used for emergency operation
- Safety accreditation, enforcement and compliance
- Ensuring vehicles follow accepted safety standards
- Build awareness on road safety and traffic rules through awareness campaign, use of different IEC strategies and training to school children.
- Ensure proper enforcement of safety regulations

Response Activities

- Requisition vehicles, trucks, and other means of transport to help in the emergency operations.

6.16 Panchayati Raj

Preventive Activities

- Develop prevention/mitigation strategies for risk reduction at community level
- Training of elected representatives on various aspects of disaster management
- President, Zilla Panchayat to be made member of District Natural Calamity Committee
- Public awareness on various aspects of disaster management
- Organise mock drills
- Promote and support community-based disaster management plans
- Support strengthening response mechanisms at the G.P. level (e.g., better communication, local storage, search & rescue equipments, etc.)
- Clean drainage channels, organise through community participation trimming of branches before cyclone season
- Ensure alternative routes/means of communication for movement of relief materials and personnel to marooned areas or areas likely to be marooned.
- Assist all the government departments to plan and prioritise prevention and preparedness activities while ensuring active community participation

Response Activities

- Train up the G.P. Members and support for timely and appropriate delivery of warning to the community
- Clearance of blocked drains and roads, including tree removal in the villages
- Construct alternative temporary roads to restore communication to the villages
- PRIs to be a part of the damage survey and relief distribution teams to ensure popular participation
- Operationalise emergency relief centres and emergency shelter
- Sanitation, drinking water and medical aid arrangements
- Participate in post impact assessment of emergency situation
- Support in search, rescue and first aid
- Failure to cooperate and misappropriation of relief materials to invite disqualification from the post

Recovery Activities

- Provision of personal support services e.g. Counselling
- Repair/ restoration of infrastructure e.g. roads, bridges, public amenities
- Supporting the G.P.s in development of storage and in playing a key role and in the coordination of management and distribution of relief and rehabilitation materials The Panchayat Samity and GP members to be trained to act as an effective interface between the community, NGOs, and other developmental organisations
- Provide training so that the elected representatives can act as effective supportive agencies for reconstruction and recovery activities.

8.17 Information & Public Relations Department

Prevention Activities

- Creation of public awareness regarding various types of disasters through media propagation
- Dissemination of information to public and others concerned regarding do's and don'ts of various disasters
- Regular liaisoning with the media

Response Activities

- Setting up of a control room to provide authentic information to public regarding impending emergencies
- Daily press briefings at fixed times at state & district levels to provide official version (during L0 also)
- Media report & feedback to field officials on a daily basis from L1 onwards
- Keep the public informed about the latest of the emergency situation (area affected, lives lost, etc)
- Keep the public informed about various post disaster assistances and recovery programmes

8.18 Revenue Department

- Coordination with State and all other departments
- Overall control & supervision
- Mobilisation of finance

6.19 District Disaster Rapid Action Force

Response

- To be trained and equipped as an elite force within the Police Department and have the capacity to immediately respond to any emergency
- Unit to be equipped with life saving, search & rescue equipments, medical supplies, security arrangements, communication facilities and emergency rations and be self-sufficient
- Trained in latest techniques of search, rescue and communication in collaboration with international agencies
- Co-opt doctors into the team