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Action Plan

for

Earthquake

1. Action Plan for Earthquake

1.1 Introduction

The Earthquake Vulnerability Atlas of India reveals that whole of Manipur is at a Very High Risk for earthquake, i.e. seismic zone V. As such, Manipur State has a long history of earthquakes albeit of low magnitude.

The Action Plan shall consist of the following five activities:

- i) Declaration of earthquake disaster
- ii) Institutional mechanism of the State Government to respond to earthquake disaster
- iii) Trigger mechanism on receiving the report of occurrence of an earthquake
- iv) Response mechanism of the concerned line departments along with the roles and responsibilities of each one of them and
- v) Immediate relief to be provided to the affected population

1.2 Declaration of earthquake disaster

The State Executive Committee (SEC) may declare any area where earthquake has occurred as disaster affected area on the recommendations of the State Relief Commissioner. The purpose of declaration of disaster is to organize effective response and mitigating the earthquake effects.

1.3 Institutional mechanism of the State Government to respond to earthquake disaster

The Relief & Disaster Management Department is primarily responsible for emergency response and relief in the State, while the Manipur State Disaster Management Authority (MSDMA) is designated as the nodal agency for formulation of policies, long term planning, coordination and monitoring body for mitigation, reduction and preparedness for disasters in the State. The Earth Sciences Department of Manipur University carries out seismological research and monitoring activities. These are useful to scientists for statistical analysis and knowing the sites of ongoing seismicity.

The institutional mechanism established in the State for management of disasters is given in Chapter 1 of Vol. 1. The composition of the State Emergency Operation Centre (SEOC) along with its staff structure is placed at **Annexure-1**.

1.4 Trigger mechanism on receiving the report of occurrence of an earthquake

An earthquake of magnitude 5 or more is likely to cause deaths and injuries to human beings and damage to all kinds of property, both private and public. Unfortunately there is very little warning available before the earthquake. Therefore planning should cater for a quick response at all levels to reduce the effects of the earthquake to the minimum.

The Relief & DM Department of the State will be the nodal department for formulating, controlling, monitoring and directing measures for earthquake preparedness, organizing rescue, relief and rehabilitation. All other concerned departments shall extend full

cooperation in all matters pertaining to the management of the earthquake disaster whenever it occurs.

The occurrence of an earthquake may be reported by the Indian Meteorological Department (IMD) or any other agency to the Relief Commissioner by the fastest means. The State Executive Committee (SEC) under the chairmanship of the Chief Secretary shall be intimated immediately on the occurrence of any major earthquake.

Besides these, the SEOC shall also receive reports on the earthquake from district and Block levels. On receipt of the information, the SEOC shall verify the authenticity of the reports and will inform the real situation to concerned authorities.

1.5 Response mechanism of the concerned line departments along with the roles and responsibilities of each one of them

1.5.1 Information and reporting:

- The agencies who shall provide information to the SEOC about the occurrence of an earthquake in the State are as shown below:
 - IMD
 - DEOC
 - Any other agency
- The SEOC shall be activated for emergency response on the occurrence of any major earthquake. The SEOC should initiate following activities:
 - i) State EOC shall report the occurrence of a major earthquake to the following:
 - Secretary to Governor
 - Secretary to Chief Minister
 - Deputy Chief Minister
 - Chief Secretary
 - Relief Commissioner
 - National Disaster Management EOC at MHA, GoI
 - Vice Chairman, National Disaster Management Authority (NDMA)
 - Secretary, MHA, GoI.
 - ii) State EOC to alert state search and rescue machinery for emergency response as also fire brigade personnel.
 - iii) State EOC to verify the authenticity of the information from authorized scientific agencies as well as District and Block EOCs/Control Rooms.
 - iv) State EOC to contact its regular and emergency staff to report immediately.
 - v) All Nodal Officers of the State Departments to be contacted to be available in the EOC immediately.

- vi) State EOC to remain in constant touch with control rooms at national district and Block level.
- vii) Overall management of state EOC shall be taken over by the Relief Commissioner.
- On receipt of information, Relief Commissioner shall:
 - Contact all member of SEC to inform them about the venue and time of first meeting (chaired by Chief Secretary) to assess the situation and decide the course of action to be adopted by the State government
 - Issue instructions to all departments to ensure that all State Government employees to report for duty immediately in order to execute their responsibilities as mentioned in their departmental Earthquake Management Plan.
 - Instruct all line departments to ensure their Nodal Officers to remain available round the clock in state EOC with full updated information of the activities of their departments.
 - Prepare and submit daily situation report to Government of India, NDMA and Chief Secretary.
 - If necessary depute Senior State level officers to worst affected Districts/ Blocks for effective implementation and supervision of Relief Operation.
 - Mobilize additional manpower from the departments to the affected Districts / Blocks for supporting the Relief Operations.
 - Management of Media (Press/TV Channels/Government Press Notes) to be carried out by the Secretary-in-charge of DIPR with special emphasis on rumour control. He shall maintain constant liaison with Relief Commissioner.

1.5.2 Restoration of lines of communications and essential services to facilitate emergency response:

- Establishment of Emergency Communications.
- Restoration of Communication Links (Road & Air).
- Restoration of power and electricity.
- Supply of safe drinking water.
- Restoration of essential lifeline infrastructure.

1.5.3 Search, rescue and medical assistance

- Identification of areas where SAR Teams to be deployed.
- Coordination of SAR teams for their quick deployment in allotted areas.
- Provision of quick transport of SAR teams to affected areas.
- PWD to evolve a mechanism for clearing access routes and debris in order to facilitate search and rescue operations.
- Mobilization of specialized equipments and machinery to affected areas.
- Cordoning off of affected areas with control of entry and exit.
- Traffic Management by establishment of traffic points and check-posts.

- The Home Department to evolve a mechanism for providing security of properties of government and public in the affected areas.
- Setting up of field hospitals in the affected areas and deployment of mobile hospitals.
- Arrangements to be made for quick transportation of injured victims to the hospitals.
- Secretary (Health) to evolve a mechanism for speedy treatment of casualties.

1.5.4 Emergency relief (shelter, food, clothing, etc.)

- (a) Establishment of Temporary shelters for evacuees.
- (b) Ensuring provision of essential services as under:
 - Arrangement for food, clothing, blanket/bedding, drinking water, sanitation and hygiene, lighting arrangements and essential medicines.
 - Deployment of mobile hospitals in affected areas for treatment of victims.
 - Providing counselling services to the earthquake victims and their relatives.
- (c) Arrangement for providing transport facility to send dead bodies to their homes. The administration should also ensure Law and Order during shifting of the dead bodies.
- (d) Ensure establishment of communication link between the affected people and their relatives outside.

A Task and Responsibility Matrix for Emergency Response Phase (first 72 Hours of the incident) is given below;

1.5.5 Task & Responsibility Matrix for Emergency Response Phase (First 72 Hours of the Incident)

Time Frame	SN	Task	Responsibility
0 + 15 Minutes	1	Report the occurrence of earthquake to Chief Secretary, Relief Commissioner, Heads of all line departments, Chief Minister's Office, NDMA, and EOC at MHA, GoI	SEOC
0 + 30 Minutes			
	2	Establish communication link by activating alternate communication equipment i.e. satellite phone, HF / VHF set, HAM Radio, VSAT etc. in State / District EOCs and Block control rooms	SEOC
	3	Instruct deployment of Mobile Emergency communication Units to affected areas for establishing communication link	SEOC
	4	Verify the authenticity of the incident from agencies like IMD, District / Block control rooms, Police and Fire Brigade control rooms	SEOC

Time Frame	SN	Task	Responsibility
	5	In case of L-2 level event, overall management of SEOC shall be taken over by Relief Commissioner	Relief Commissioner
	6	Instruct Nodal officers of line departments to report in SEOC	Relief Commissioner
	7	Hold first meeting with Nodal officers	Relief Commissioner
	8	Contact the Heads of all line departments including the DIPR to reach SEOC	Relief Commissioner
	9	Alert SDRF/FES for quick mobilization to affected areas	Relief Commissioner
	10	Request for the services of NDRF and Armed forces, if required through designated representative	Relief Commissioner
0 + 1 Hour			
	11	Instruct both regular and emergency staff of SEOC to report for duty	SEOC i/c
	12	Dispatch of Search & Rescue teams to the affected areas	SEOC i/c
	13	Instruct Quick Assessment Task Force to submit preliminary need and loss assessment report of the affected areas	SEOC i/c
	14	Alert Medical Quick Response Teams to the affected areas	SEOC i/c
	15	Make arrangements for aerial survey of the affected areas	SEOC i/c
	16	Instruct local administration to evacuate victims to safer sites	Relief Commissioner
	17	Contact Chief Secretary for deciding on time and venue for holding SEC meeting at the earliest	Relief Commissioner
	18	Inform all members to attend SEC meeting in designated venue to assess situation and review emergency measures	Relief Commissioner
	19	Instruct concerned authorities or Agencies to shut down critical operations	Relief Commissioner
	20	Contact MARSAC, NESAC, NRSA, ISRO and Ministry of Defence for aerial / satellite imageries of the affected areas	Relief Commissioner
0 + 2 Hours			
	21	Inform DP/GAD to ensure all State Government employees report for emergency	Relief Commissioner

Time Frame	SN	Task	Responsibility
		duties within half an hour	
	22	SEC to assess situation, delegate responsibilities for organizing rescue and relief operations	SEOC i/c
	23	Senior State level officers to be deputed to the affected areas	Chief Secretary
	24	Activate Operations Section of IRS for Emergency Response Operation	IRS Heads
	25	Assess the conditions of road, and air communication link for quick mobilization of Emergency Teams and resources to affected areas and take follow up actions	SEOC i/c
	26	Secretary/Director, IPR to establish media management / information cell for public information, guidance and rumour control	DIPR
	27	Request may be made for assistance from Central Government (MHA and MOD) if required	Chief Secretary/ Relief Commissioner
	28	Request the nearest headquarters of the Armed Forces to render assistance in emergency search, rescue and relief operations	Relief Commissioner
	29	Contact private / public sector agencies in the State to assist in emergency rescue and relief operations	Relief Commissioner
	30	Inform Secretaries of the departments to provide necessary logistics support to emergency operation task forces	Relief Commissioner
	31	If necessary, assistance may be asked from neighbouring states and outside agencies	Chief Secretary/ Relief Commissioner
	32	Set up separate desks for each operation task force and NGO coordination desk in the SEOC for coordinating emergency operations	SEOC i/c
	33	Provide security in affected areas and maintain law and order situation	DGP
	34	Mobilize Medical Quick Response Teams to affected areas	DHS
	35	Mobilize SAR Teams and search & rescue equipment and machinery to affected areas	SDRF
	36	DIPR to establish information centres near affected areas to provide guidance to volunteers and aid agencies	DIPR
0 + 3 Hours			

Time Frame	SN	Task	Responsibility
	37	Make suitable transportation arrangement for mobilization of quick response teams to the affected areas	SDRF/ Director Transport
	38	Maintain constant touch with the National / District and Block EOCs	SEOC i/c
	39	Establish Press / Media Centre for media management and information dissemination	DIPR
	40	Arrange for press / media release for rumour control and public information and guidance	DIPR
	41	Alert all major hospitals to make necessary arrangement for treatment of injured	DHS
0 + 6 Hours			
	42	Establish relief coordination centre at the airport for arrival of Search & Rescue and Medical Teams coming for humanitarian aid	Relief & DM Department
	43	Establish central relief coordination centre at State Head Quarters.	Relief & DM Department
	44	Instruct to cordon affected areas and setting up of check posts to control entry and exit	DGP
	45	Open access routes and manage traffic for mobilization of equipment, machinery and volunteers to the affected areas	DGP
	46	Conduct aerial survey and also mobilize quick assessment teams to affected areas	Relief Commissioner
	47	Establish information centres at the arrival and departure points especially at the airport and interstate bus terminus	DIPR
0 + 12 Hours			
	48	Mobilize relief materials i.e. tents, food materials, water, essential medicines, blankets, etc. to the affected districts and Blocks	Relief Commissioner/ Deputy commissioner
	49	Arrange to shift evacuated persons to temporary shelters and ensure provision of food, water facilities, blankets and storage of relief materials	Relief Commissioner/ Deputy commissioner
	50	Arrange road and air transport at State / District headquarters for dispatch of relief materials to the affected areas	Director Transport
	51	Set up field hospitals near the affected areas	DHS
	52	Arrange to shift injured persons to field hospitals	DHS/ Deputy Commissioner

Time Frame	SN	Task	Responsibility
	53	Instruct Deputy Commissioners to establish relief coordination centre and godowns near affected area and provide full security cover as well	Relief Commissioner
	54	Prepare quick need assessment report for planning of relief operation and mobilization of resources to the affected areas	Relief Commissioner
0 + 24 Hours			
	55	Instruct to set up Coordination Centres at the Resident Commissioner's Office in New Delhi, Kolkata and Guwahati	Relief Commissioner
	56	Hold review meetings with Nodal Officers in every 12 hours	Relief Commissioner
	57	Prepare and circulate the situation report	SEOC i/c
	58	Prepare press notes twice a day	DIPR
	59	Depute additional officers and supporting staff to affected areas from non-affected areas	Chief Secretary
	60	Restore essential services i.e. power, water supply, telecommunication facilities of SEOC, Secretariat, PHQ, AIR, Doordarshan, Governor House, Chief Minister's Office, and senior officials on priority basis	Power/ PHED/BSNL
	61	Coordinate with Emergency Operation Task Forces mobilized to the affected areas	Relief Commissioner
0 + 48 Hours			
	62	Ensure safety and security of personnel deputed in affected areas for emergency response operation	DGP
	63	Earmark storage point for medical supplies at affected sites	DHS
	64	Arrange for identification, photograph, post mortem and maintenance of records for disposal of dead bodies	DHS
	65	Arrange information centre at shelter site for maintaining records of victims and to provide guidance to relatives, NGOs, etc.	DIPR
	66	Arrange for complaints regarding missing persons and initiate search in shelters, hospitals and police records	DGP
	67	Arrange for SDMs' empowerment for waiving off post mortem of dead bodies	DP

Time Frame	SN	Task	Responsibility
	68	Arrange for additional manpower if necessary for disposal of dead bodies	DP
	69	Arrange for transportation of dead bodies to their native places if so required	Deputy Commissioner
0 + 72 Hours			
	70	Arrange for disposal of unidentified and unclaimed dead bodies	Deputy Commissioner
	71	Arrange for transportation of injured from field hospitals to base hospitals	DHS/ Director Transport
	72	Activate short and interim relief measures	Deputy Commissioner
	73	Arrange for distribution of cash doles to the victims	Deputy Commissioner

1.6 Immediate relief to be provided to the affected population

1.6.1 Short-Term Relief Measures

- (1) Provide temporary shelter to affected people
- (2) Evacuation site should be safe, and easily accessible.
- (3) Continue to provide essential services to the affected people i.e. food, water, clothing, sanitation and medical assistance

The Relief Commissioner to ensure the following in the relief camps:

- Special emphasis on Hygiene and sanitation aspects should be given in relief camp sites.
- Separate area should be earmarked within the relief camp for storage of relief materials.
- Adequate manpower and transport facilities for the camp site.
- Arrangements to be made for trauma management.
- Mobile medical units to be sent to remote areas with a view to provide medical assistance to the victims/injured.
- Information centre should be established by the administration.

1.6.2 Interim Relief Measures

- Arrangements to be made for identification and maintenance of the records of disposal of dead bodies in the affected areas.
- Arrangements to be made to record the complaints of all persons reported missing. Follow up action in terms of verification of the report also needs to be made.

- Sub-divisional magistrates to be empowered to exempt the requirement of post-mortem in case of mass casualties. DP may depute additional SDMs to expedite disposal of the dead bodies.
- Unclaimed/unidentified dead bodies to be disposed off at the earliest after keeping their records.
- Additional manpower to be deployed in the affected areas for supplementing the efforts of the local administration.
- Separate Cell to be established at State/District/Block level to coordinate with the NGOs and outside donor/aid agencies.
- Regular meetings of the different stakeholders/departments should be organized at state level for sharing of information, developing strategies for relief operations.
- DIPR to coordinate with the media to play a positive role in disseminating appropriate information to public and the government in order to facilitate the speedy recovery.

1.6.3 Assessment of Damage / Loss and Relief needs

- The Relief Commissioner to issue instructions to the Deputy Commissioners to provide 'the need and loss assessment'.
- Adequate manpower, vehicles, stationery etc should be provided to supplement the efforts for need/loss assessment.
- Identification and demolition of dangerous structures in the affected areas to minimize further loss of life and injuries.
- Arrangements for debris removal and its appropriate disposal.
- Arrangements for distribution of gratuitous relief and cash doles.
- Arrangements to be made for survey of human loss and distribution of ex-gratia relief to the families of deceased persons.
- Teams to be formed and dispatched to the affected areas for detailed assessment of houses and property assessment.
- As reconstruction of houses will take a long period, arrangements to be made to provide interim shelters to the affected.
- Identification of the sites for interim shelter.
- Allocation of areas to the affected families.
- Providing essential services at the interim shelter sites such as water, power, drainage / sanitation, PDS shops, etc.
- Distribution of shelter materials to individual families.

Action Plan

For

Cyclone

2. Action Plan for Cyclone

2.1 Introduction:

Manipur is a landlocked State and therefore is not affected directly by tropical cyclones arising in Bay of Bengal. However it is vulnerable to associated hazards of cyclonic winds and heavy rains. The purpose of this action plan is to develop quick response at all levels to reduce the effects of cyclone with an effective coordinated way.

2.2 Associated Authority

The Nodal Department for controlling, monitoring and directing measures for organizing rescue, relief and rehabilitation is the Relief & DM Department of the State. All other concerned Departments shall extend full cooperation in all matters pertaining to the management of the Cyclone disaster whenever it occurs. The State Departments like Home, Health, PHED, PWD, Transport, Power, DIPR etc. shall have a major role in emergency response during occurrence of Cyclone.

2.3 Disaster Declaration

The State Executive Committee (SEC) may declare any area where Cyclone has occurred as disaster affected area on the recommendations of the State Relief Commissioner. The purpose of declaration of disaster is to organize effective response and mitigating the adverse effects of disaster.

2.4 4-stage warning system for Tropical Cyclones

1.) Pre-Cyclone Watch

It is issued when a depression forms over the Bay of Bengal irrespective of its distance from the coast and is likely to affect Indian coast in future. The pre-cyclone watch is issued by the IMD and is issued at least 72 hours in advance of the commencement of adverse weather. It is issued at least once a day.

2.) Cyclone Alert

It is issued at least 48 hours before the commencement of the bad weather when the cyclone is located beyond 500 Km from the coast. It is issued every three hours.

3.) Cyclone Warning

It is issued at least 24 hours before the commencement of the bad weather when the cyclone is located within 500 Km from the coast. Information about time /place of landfall are indicated in the bulletin. Confidence in estimation increases as the cyclone comes closer to the coast

4.) Post landfall outlook

It is issued 12 hours before the cyclone landfall, when the cyclone is located within 200 Km from the coast. More accurate & specific information about time /place of landfall and associated bad weather indicated in the bulletin. In addition, the interior distraction is likely to be affected due to the cyclone are warned in this bulletin.

2.5 Warning Dissemination process

1. Cyclone/flood forecasting is generally the responsibility of the Indian Meteorological Department (IMD). IMD is the nodal agency for providing cyclone warning services. IMD's INSAT satellite based Cyclone Warning Dissemination System (CWDS) is one of the best currently in use in India to communicate cyclone warnings from IMD to community and important officials in areas likely to be affected directly and quickly.
2. After getting information from IMD, warning dissemination is a responsibility of State Government (Relief Commissioner). The RC is responsible for disseminating cyclone warnings to the public and Line Departments.
3. On receiving an initial warning, the office of the RC disseminates the warning to all Line Departments, the District administration and PHQ. Warning messages are transmitted though wireless to all districts and Blocks. Deputy Commissioners shall be provided with satellite phones and a Ham radio to maintain effective communication, even if terrestrial and cell-phone communication fails.
4. The state EOC and control rooms of the other line departments at the State and District level shall also get the warnings. The control rooms shall be activated on receiving the warnings.

2.6 Plan Activation

The cyclone response structure will be activated on the receipt of cyclone warning by the Indian Meteorological Department (IMD). The occurrence of a cyclone may be reported by the IMD to the Relief Commissioner/MSDMA by the fastest means. The Relief Commissioner (RC) will activate all the Departments for emergency response including the State EOC, District EOC and SDRF. He will issue instructions to include the following details:

- Specify exact resources (in terms of manpower, equipments and essential items from key dept. /stakeholders) required.
- The type of assistance to be provided
- The time limit within which assistance is needed
- Details of other Task/Response Forces through which coordination should take place

The State EOC and other control rooms at the state level as well as district control rooms should be activated with full strength. Once the situation is totally controlled and normalcy is restored, the RC shall declare End of Emergency Response and issue instructions to withdraw the staff deployed in emergency duties.

2.7 Roles and Responsibility

Time Frame	SN	Task	Responsibility	Activity
Time = 0 – 72 hrs	1	Warning receipt and dissemination	SEOC	<ul style="list-style-type: none"> • Report the generation of Cyclone in Arabian Sea/ Indian Ocean after getting information from IMD to following officials; <ul style="list-style-type: none"> - Relief Commissioner - Chief Secretary of the State - Members of SEC - Secretary to Chief Minister - National Disaster Management Authority, GoI. - All concerned Deputy Commissioners as well as Control Rooms of the district/s likely to be affected as per preliminary warning of IMD. - Ministers and Secretaries of all line departments • Instruct all Deputy Commissioners (of the districts likely to be affected) to activate District Control Room at full strength. • Alert all response teams in the State for deployment. • Remain in constant touch with control rooms at National & State Level. • Instruct and alert all heads of departments of the key line departments to activate their departmental plan and SOPs for Cyclone response.
	2.	Interdepartmental Coordination	Relief Commissioner	<ul style="list-style-type: none"> • Instruct all State government officers and employees in the State to report to their respective Heads for emergency duties (Only if the warning is of a level 2 disaster or as per the decision taken in the meeting of the SEC headed by Chief Secretary). • Alert the Deputy Commissioners of districts not likely to be affected to be prepared for providing: <ul style="list-style-type: none"> ○ Additional manpower ○ Additional resources <ul style="list-style-type: none"> - Machinery &

Time Frame	SN	Task	Responsibility	Activity
				Equipment - Relief material to the districts likely to be affected
	3	Establishment of lines of Communication	SEOC i/c	<ul style="list-style-type: none"> • Activate alternative communication equipments i.e. satellite phones, HF/VHF sets, Ham radio, VSAT in State EOC and ERCs, District and Block control rooms • Establish communication links with EOCs and Search & Rescue Teams in all districts and alert them to be in stage of readiness. • Establish communication links with villages likely to be affected.
Time = 0 – 48 hrs	1.	Review of situation and reporting	SEOC i/c	<ul style="list-style-type: none"> • Establish contact with IMD, CWC, ISRO and the Defence ministry of GoI for aerial / satellites imageries of the latest Cyclone threat. • Get the latest weather report from IMD/other international Web Sites to know the exact location of Cyclone and the likely area where landfall will take place. • After reviewing the weather report and satellite images issue instructions and orders for emergency response to areas likely to be affected.
	2.	Management of EOC and Cyclone Response	Relief Commissioner	<ul style="list-style-type: none"> • Take over full command of State EOC. • Instruct line departments to depute representatives at the State and District EOCs. • Hold a meeting with leaders of task forces and entrust them their tasks. • Ensure that Cyclone information is disseminated to all who are at danger • Arrange emergency meeting of SEC to devise a plan of action.
			DIPR	<ul style="list-style-type: none"> • Arrange dissemination of information through various means of communication such as Radio, TV, Cable Network, SMS about Cyclone warning to districts/areas which are

Time Frame	SN	Task	Responsibility	Activity
				likely to be hit by Cyclonic Storm.
			Deputy Commissioner	<ul style="list-style-type: none"> Impose restriction on all transport activities in areas that are likely to be affected by Cyclone. .
			Relief Commissioner	<ul style="list-style-type: none"> Alert following teams to remain in readiness: <ul style="list-style-type: none"> Evacuation Emergency Medical Services Search and Rescue Alert following emergency response forces to remain in readiness: <ul style="list-style-type: none"> SDRF Fire & Emergency Services NDRF Village Disaster Management Teams of volunteers/VDF Police, Home Guards State Reserve Police Force Army (if required) Air Force (if required)
	3.	Cyclone response to areas (likely to be affected)	Relief Commissioner	<ul style="list-style-type: none"> Based on the warning issued by IMD, pin point the districts and villages likely to be affected by Cyclone and start the procedure for identifying safe places/shelters for evacuation if deemed necessary in those villages. Village wise data of safe sheltering for evacuation should be prepared by the Deputy Commissioners in advance and status of the shelters with the capacity of the shelter and other available facilities at the site should be reported.
			Director Transport	<ul style="list-style-type: none"> Make transport arrangement for mobilization of all emergency response teams.
			Deputy Commissioner	<ul style="list-style-type: none"> Ensure arrangements are in place to evacuate injured if needed.
			DGP	<ul style="list-style-type: none"> Cordoning off of areas for restricting entries of road traffic.
			DGP	<ul style="list-style-type: none"> Ensure law and order is maintained in areas likely to be affected.
			Director	<ul style="list-style-type: none"> Ensure that the schools and colleges

Time Frame	SN	Task	Responsibility	Activity
			School/ Higher Education	are closed in areas likely to be affected by Cyclone and associated hazards.
			DIPR	<ul style="list-style-type: none"> • Ensure dissemination of information to remote areas by local means. • Ensure that local help lines are opened and effectively managed for public information, guidance and rumour control. • Ensure that the information to public and media about the progress of Cyclone at periodic intervals is released.
			Relief Commissioner	<ul style="list-style-type: none"> • Make arrangements for logistic support to all emergency response teams.
			DHS	<ul style="list-style-type: none"> • Health Department to activate their Departmental Cyclone Disaster Management Plan and Departmental SOPs for Management of casualties
Time = 0 - 24 hrs	1.	Review of situation and reporting	SEOC i/c	<ul style="list-style-type: none"> • Establish contact with IMD, CWC, ISRO and the defence ministry of GoI for aerial / satellites imageries of the latest Cyclone threat. • After reviewing the weather report and satellite images issue instructions and orders for emergency response to areas likely to be affected.
			Relief Commissioner	<ul style="list-style-type: none"> • Review and monitor following activities: <ul style="list-style-type: none"> ○ Evacuation of people from areas likely to be affected ○ Positioning of Search and Rescue Teams ○ Positioning of mobile communication units ○ Positioning of quick medical response teams ○ Mobilization of restoration teams of respective departments ○ Requirement of armed forces in rescue and relief operations ○ Dissemination of information to the vulnerable areas ○ All preparedness measures to be taken by various

Time Frame	SN	Task	Responsibility	Activity
				<p>authorities</p> <ul style="list-style-type: none"> Keep in touch with National, District and Block Control Rooms Release information at appropriate time to media and public regarding response measures organized by the Government
	2	Emergency Response Management	Relief Commissioner	<ul style="list-style-type: none"> If reports regarding striking of Cyclone are confirmed by IMD and other sources, start the emergency response and relief operations.
Relief Commissioner			<ul style="list-style-type: none"> Divert the emergency services to areas likely to be affected as per the warning issued by IMD. 	
DIPR			<ul style="list-style-type: none"> Inform the public residing in areas likely to be affected to take precautions and evacuate if required through various means such as SMS, AIR, FM Radio, Doordarshan, etc. 	
Deputy Commissioner			<ul style="list-style-type: none"> Start evacuation from the likely affected areas through Police support, if necessary 	
	3	Emergency Relief Management	Relief Commissioner/ Deputy Commissioner	<ul style="list-style-type: none"> Ensure that the Relief Management work planned in the areas likely to be affected by the Cyclone are well organized.
Deputy Commissioner			<ul style="list-style-type: none"> Ensure that the arrangement for basic amenities (shown below) at evacuation/relief centres are made by the respective departments: <ul style="list-style-type: none"> Drinking water Food Clothing Sanitation and hygiene, Lighting Medicines and other Health Care 	
Relief Commissioner			<ul style="list-style-type: none"> Inform following agencies to be in a state of readiness for assisting in the Cyclone response measures (if required): <ul style="list-style-type: none"> Public sector agencies Private sector agencies 	

Time Frame	SN	Task	Responsibility	Activity
				<ul style="list-style-type: none"> ○ NGOs ○ CBOs ○ Volunteer Organizations
			Chief Secretary	<ul style="list-style-type: none"> ● Request for help (if needed) to MHA/National Disaster Management Authority
			DIPR	<ul style="list-style-type: none"> ● Make necessary arrangements for public information/guidance, public opinion and rumour control.
			Deputy Commissioner	<ul style="list-style-type: none"> ● Restriction may be imposed for transportation in threatened areas.
Time = 0 Hrs	1.	Disaster Declaration	SEC	<ul style="list-style-type: none"> ● When Cyclone makes a landfall, Cyclone affected Deputy Commissioners should send a communication to the State Govt. to declare the area as disaster affected, if necessary, (depending upon the nature and intensity of impact)
	2.	Preliminary assessment, deployment of emergency response teams and information dissemination	Deputy Commissioner	<ul style="list-style-type: none"> ● Deputy Commissioners should send teams to the affected areas to take stalk of the effects of Cyclone and associated rain. ● Deputy Commissioners should send sector wise situation reports to: <ul style="list-style-type: none"> ○ State EOC/RC ○ MSDMA
			Deputy Commissioner	<ul style="list-style-type: none"> ● Deployment of following teams to Cyclone affected areas: <ul style="list-style-type: none"> ○ Emergency Communication Teams ○ Emergency Medical Services Teams ○ Search and Rescue Teams (With Equipments) ○ Preliminary damage Assessment Teams ○ Need Assessment Teams
			SEOC i/c	<ul style="list-style-type: none"> ● Establish communication link with affected districts by activating alternate communication equipments such as Satellite Phones, HF/VHF Sets, Ham Radio, V Set etc., in State/District EOCs and Block Control Rooms. ● Arrange dissemination of information

Time Frame	SN	Task	Responsibility	Activity
				about occurrence of Cyclone and areas that are affected by it to Media & Public.
Time = 0 + 24 Hrs	1.	Mobilization and Deployment	Relief Commissioner/ Deputy Commissioner	<ul style="list-style-type: none"> Remain in constant touch with IMD for updates on weather forecast for the coming hours and plan accordingly. Immediate mobilization of following units/teams to areas affected by Cyclone and associated rains.
				<ul style="list-style-type: none"> S & R Teams of SDRF /Fire and Emergency Services
				<ul style="list-style-type: none"> Medical Quick Response Teams
				<ul style="list-style-type: none"> Quick Damage & Loss Assessment Teams
				<ul style="list-style-type: none"> Quick Need Assessment Teams
				<ul style="list-style-type: none"> Road Clearance Teams
				<ul style="list-style-type: none"> Teams for disposal of dead bodies
				<ul style="list-style-type: none"> Teams for disposal of carcasses
				<ul style="list-style-type: none"> Teams for debris clearance (if any)
				<ul style="list-style-type: none"> Teams for maintaining Law & Order in the affected areas
	2.	Measures for quick and organized response	Relief Commissioner/ Deputy Commissioner	<ul style="list-style-type: none"> State EOC and Deputy Commissioners of the affected Districts should ensure that the following response activities are carried out immediately:
	a.	Clearance of access roads to reach at the sites of affected areas	Deputy Commissioner	<ul style="list-style-type: none"> To survey the access roads/routes leading to the affected areas and manage traffic for mobilization of equipments, machinery and volunteers. Identify alternate roads/routes for evacuation. Undertake repairing/restoration of damaged roads leading to the affected areas. Identify and declare unsafe buildings/structures in Cyclone affected areas. Evacuate people from unsafe buildings/structures and shift them to relief camps/sites. Divert/stop transport activities heading

Time Frame	SN	Task	Responsibility	Activity
				towards Cyclone affected areas.
	b.	Necessary Arrangements at evacuation/relief centres	Deputy Commissioner	<ul style="list-style-type: none"> • To ensure that necessary arrangements at evacuation/relief Centres is made with sufficient availability of: <ol style="list-style-type: none"> a. Food, b. Water, c. Blankets/Clothing d. Medicines e. Lighting f. Sanitation and hygiene etc. • To ensure necessary security arrangements for the personals (Emergency responders/relief teams) who are working at Relief Centres and involved in distribution of Relief Materials. • To ensure that law and order is maintained at evacuation/relief Centres and in the affected areas as well.
	c.	Ensure immediate health and minimization of outbreak of disease	DHS	<ul style="list-style-type: none"> • To establish camp hospitals near the affected areas. • To make transportation arrangements to shift seriously injured persons to nearest- <ol style="list-style-type: none"> a. Camp Hospitals, b. Block and District Hospitals, c. Regional and State Hospitals • Ensure that the Hospitals are well prepared to deal with seriously injured persons. • To ensure that the required medical assistance/aid and medicines are provided to the affected people at site as well as at evacuation/relief centres in the affected area and necessary records are maintained. • Take sanitation and epidemic control measures for preventing any water borne disease. • Keep adequate stock of essential medicines, first-aid etc. at Block/district hospitals • Take steps to purify drinking water sources

Time Frame	SN	Task	Responsibility	Activity
				<ul style="list-style-type: none"> If required, take the help of doctors/paramedics from the list of doctors/paramedics available at the Block/district level for immediate medical assistance.
	d.	Care of Animals	Director, Veterinary & AH	<ul style="list-style-type: none"> Assess need for fodder if required. Keep ready teams for carcass disposal (if required).
	e.	Information to public and media	DIPR	<ul style="list-style-type: none"> Establish Media/Press Centre for media management and information dissemination Ensure that the information to media/general public about the response of the State Government is released in an organized manner. Organize media briefing twice a day at pre-determined intervals.
	f.	Other important work related to immediate response	Relief Commissioner	<ul style="list-style-type: none"> Prepare quick need assessment report for planning of relief operation. Additional assistance may be asked for emergency response/relief from GoI-NDMA (If needed).
			Relief Commissioner/ SEOC i/c	<ul style="list-style-type: none"> Prepare situation report and circulate it twice a day in the morning and evening to key Government functionaries. Maintain constant touch with National, District and Block EOCs and other control rooms. Remain in constant touch with IMD for updates on weather forecast for the coming days and plan accordingly. Conduct Aerial survey of affected areas for taking stock of the situation.
			Deputy Commissioner	<ul style="list-style-type: none"> Activate evacuation & relief centres according to needs/situation. Maintain record of persons admitted at evacuation/relief centres.
Time = 0 + 24 to	1.	Review of situation and reporting	SEOC i/c	<ul style="list-style-type: none"> Establish contact with IMD, CWC, ISRO and the defence ministry of GoI for aerial / satellites imageries about further weather condition and plan accordingly.

Time Frame	SN	Task	Responsibility	Activity
48 Hrs	2.	Restoration of critical infrastructure/essential services	PWD/ PHED/ Power/ BSNL	<ul style="list-style-type: none"> • Ensure that the essential services/critical infrastructure of the affected areas have been restored or alternative arrangement is made for ensuring safety of people and smooth management of emergency response. • Ensure that key administrative and lifeline buildings are brought back to operation quickly. • Designate and deploy senior officers (as per the need) to worst affected area/s to oversee rescue/relief operation. • Ensure following primary necessities are restored <ul style="list-style-type: none"> ○ Power ○ Water ○ Telecommunication ○ Roads ○ Bridges
	3.	Disposal of Dead bodies	Deputy Commissioner	<ul style="list-style-type: none"> • Ensure following procedure is followed before disposal/handing over of dead bodies: <ul style="list-style-type: none"> d. Photographs of the dead bodies are taken, e. Identification of the dead bodies is done, f. Post Mortem where ever necessary and possible is carried out, g. Handing over dead bodies of persons known/identified to their relatives, h. Disposal of unclaimed and unidentified dead bodies.
			Director, Veterinary & AH	<ul style="list-style-type: none"> • Animal Husbandry Department to ensure medical aid to cattle that are injured. • Disposal of animal carcasses with the help of local bodies/health dept.
	4.	Public Information and Media	DIPR	<ul style="list-style-type: none"> • Ensure that the information about progress of rescue and relief is provided to media/public in an

Time Frame	SN	Task	Responsibility	Activity
		Management		<p>organized manner at least twice a day.</p> <ul style="list-style-type: none"> Establish help lines for facilitating communication between the victims and their relatives residing outside the affected areas. Establish Information Centres at strategic locations for providing information about persons evacuated to the relief centres/hospitals.
	5.	Miscellaneous rescue and relief works	Relief Commissioner/ DP	<ul style="list-style-type: none"> Assess the situation and take appropriate action to accelerate the Search & Rescue Operations. Depute additional officers and supporting staff to Cyclone affected areas from non-affected areas (if required) to accelerate the rescue and relief operations.
			Relief & DM Department	<ul style="list-style-type: none"> Ensure that the relief assistance received from outside is centrally received, stored and sent for distribution to Cyclone affected areas according to their need and proper accounts are maintained about both receipt and distribution.
			Deputy Commissioner	<ul style="list-style-type: none"> Deputy Commissioners shall oversee the functioning of relief centres and ensure adequate supply of relief materials.
Time = 0 + 48 to 96 Hrs	1.		Relief Commissioner/ SEOC i/c	<ul style="list-style-type: none"> Remain in constant touch with IMD for updates on weather forecast for the coming days and plan accordingly. Arrange for procurement of additional relief material required for relief operations (on the basis of need assessment). Mobilize additional relief material required for relief operations. Maintain constant touch with State & Districts EOCs.
	2.		Deputy Commissioner	<ul style="list-style-type: none"> Arrangement for transportation of injured from field hospital to base hospital Arrangement for transport of dead bodies to their native places.

Time Frame	SN	Task	Responsibility	Activity
	3.			<ul style="list-style-type: none"> • Ensure maintenance of record, timely reporting and information management. • Ensure maintenance of record and information database.
Time = 0 + 96 to 168 Hrs	1.		Relief Commissioner/	<ul style="list-style-type: none"> • Remain in constant touch with IMD for updates on weather forecast for the coming days and plan accordingly. • Review the restoration of all the public utilities and essential services in Cyclone affected areas. • Review and follow-up all necessary arrangements for emergency response & relief in the affected area/s.
	2.		SEOC i/c	<ul style="list-style-type: none"> • On receiving the message from IMD about degradation of Cyclone, inform the concerned Deputy Commissioner.
	3.		PWD/ Deputy Commissioner	<ul style="list-style-type: none"> • Organize a quick rapid visual survey of the affected areas (through a technical team of engineers) to ascertain the safety of the structures • Decide on giving the go-ahead to people to move back to their respective houses.
	4.		Deputy Commissioner	<ul style="list-style-type: none"> • After receiving the message of de-warning, ensure that people are moved back safely to their houses.
	5.		Relief Commissioner	<ul style="list-style-type: none"> • Ensure relief disbursement, allotment of funds and grants to line department and Deputy Commissioners for organizing emergency response, relief and evacuation arrangements.

2.8 Immediate relief to be provided to the affected population

2.8.1 Short-term Relief Measures

- Search, rescue and medical assistance
 - Identification of areas where SAR Teams to be deployed
 - Coordination of SAR teams for their quick deployment in allotted areas
 - Provision of quick transport of SAR teams to affected areas.
 - The PWD to evolve a mechanism for clearing access routes in order to facilitate search and rescue operations.

- Mobilization of specialized equipments and machinery to affected areas.
- Cordoning of affected areas with control of entry and exit.
- Traffic Management by establishment of traffic points and check-posts.
- The Home Department to evolve a mechanism for providing security of properties of government and public in the affected areas.
- Emergency relief (shelter, food, clothing, etc.)
 - Establishment of Temporary shelters for evacuees.
 - Ensuring provision of essential services as under:
 - Arrangement for food, clothing, blanket/bedding, drinking water, sanitation and hygiene, lighting arrangements and essential medicines.
 - Deployment of mobile hospitals in affected areas for treatment of victims.
 - Providing counselling services to the cyclone victims and their relatives.
 - Ensure establishment of communication link between the affected people and their relatives outside.
- The RC to ensure the following in the relief camps:
 - Special emphasis on Hygiene and sanitation aspects should be given in relief camp sites.
 - Separate area should be earmarked within the relief camp for storage of relief materials.
 - Adequate manpower and transport facilities for the camp site.
 - Arrangements to be made for trauma management.
 - Mobile medical units to be sent to remote areas with a view to provide medical assistance to the victims/injured.
 - Information centre should be established by the administration.

2.8.2 Interim Relief Measures

- Arrangements to be made for quick identification and maintenance of the records of disposal of dead bodies in the affected areas (Home, Revenue, Health Dept., Local Authorities).
- Arrangements to be made to record the complaints of all persons reported missing. Follow up action in terms of verification of the report also needs to be made. (Home Dept.)
- District Magistrates and sub-divisional magistrates to be empowered to exempt the requirement of identification and post-mortem in case of mass casualties. DP may depute additional sub-divisional magistrates to expedite disposal of the dead bodies. (DP & Home Dept.)
- Unclaimed/unidentified dead bodies to be disposed off with the help of pre identified voluntary Agencies at the earliest after keeping their records. (Deputy Commissioners)
- Additional manpower to be deployed in the affected areas for supplementing the efforts of the local administration. (DP/GAD).

- Separate Cell to be established at state/district/Block level to coordinate with the NGOs and outside donor/aid agencies. (Deputy Commissioners)
- Regular meetings of the different stakeholders/departments should be organized at state level for sharing of information, developing strategies for relief operations. (Relief Commissioner & Deputy Commissioners at District Level).
- DIPR to coordinate with the media to play a positive role in disseminating appropriate information to public and the government in order to facilitate the speedy recovery.

2.8.3 Assessment of Damage/Loss and Relief needs

- The Relief Commissioner to issue instructions to the Deputy Commissioners to provide ‘the need assessment’ report. The Relief Commissioner should consolidate the same and to prepare “State’s need assessment report”.
- The Relief Commissioner to issue instructions to the Deputy Commissioners to provide the damage and loss assessment report. The Relief Commissioner to consolidate the same and to prepare “State’s damage and loss assessment report” which will be useful in planning and implementing the relief operation after the disaster for the victims of the disaster.
- Adequate manpower, vehicles, stationery etc should be provided to supplement the efforts for need/loss assessment. (Relief Commissioner & Deputy Commissioners)
- The relief need assessment report should be provided by the Deputy Commissioners. (Relief Commissioner & Deputy Commissioners)
- Identification and demolition of dangerous structures in the affected areas to minimize further loss of life and injuries. (PWD, and Local Bodies)
- Arrangements for distribution of gratuitous relief and cash doles. (Deputy Commissioners)
- Arrangements to be made for survey of human loss and distribution of ex-gratia relief to the families of deceased persons. (Deputy Commissioners)
- Teams to be formed and dispatched to the affected areas for detailed assessment of houses and property damage assessment. (Deputy Commissioners)
- As reconstruction of houses will take a long period, arrangements to be made to provide interim shelters to the affected. (Deputy Commissioners)
 - Identification of the site for interim shelter
 - Allocation of areas to affected families
 - Providing appropriate shelters to the affected families
 - Providing essential services as under in the interim shelter sites.
 - Water
 - Transportation
 - Power
 - Road
 - Drainage/Sanitation
 - School
 - PDS Shops
 - Health
 - Protection
 - Distribution of shelter materials to individual families

Action Plan

for

Flood

3. Action Plan for Flood

3.1 Introduction

Floods are among the most common and destructive natural hazards causing extensive damage to infrastructure, public and private services, environment and economy. Recurring flood losses handicap the economic development of the State. The frequency and intensity of floods has grown in the State over the years primarily because of the unplanned development and increased encroachment of flood plains.

This demands better flood preparedness to make sure that appropriate and effective response measures are taken during flood emergency. Apart from an effective disaster response system, it is important to have a good flood prevention and mitigation strategy to achieve the objectives of vulnerability reduction. The Action Plan will consist of the following activities:

1. Declaration of Flood disaster
2. Flood Forecasting and Warning
3. Trigger mechanism
4. Response mechanism of the concerned line departments along with the roles and responsibilities
5. Relief

3.2 Declaration of Flood Disaster

The State Executive Committee (SEC) may declare any area where Flood has occurred as disaster affected area on the recommendations of the State Relief Commissioner. The purpose of declaration of disaster is to organize effective response and mitigating the adverse effects of disaster.

3.3 Flood Forecasting and Warning

Flood forecasting is a process whereby the authorities are alerted to impending conditions where floods may be likely. Flood forecasting requires understanding of meteorological and hydrological conditions, and is therefore the responsibility of the appropriate government agencies. National organisation is required, but information needs to be made available at a river basin scale. This allows forecasting to integrate with flood warning arrangements.

The main components of a national flood forecasting and warning system are as follows:

- Collection of real-time data and prediction of flood severity and time of onset of particular levels of flooding.
- Preparation of warning messages, describing what is happening, predictions of what will happen and expected impact. Messages can also include what action should be taken.
- The communication and dissemination of such messages.
- Interpretation of the predictions and other flood information to determine flood impacts on communities.
- Response to the warnings by the agencies involved and communities.

- Review of the warning system and improvement in the system after flood event.
- If predictions fail, the reasons of prediction failure should be communicated to communities in order to establish trust.

For a flood warning system to work effectively, all these components must be present and they must be integrated with each other rather than operating in isolation.

3.3.1 Community based flood forecasting and warning systems

It is important that the people in each community receive information as early as possible about the possibility of flooding in their area. In addition to the valuable information from the official flood warning system, communities should attempt to develop their own warning systems. At community level, it is important that warnings are received by all individuals. The way in which messages are disseminated in communities will depend on local conditions, but may include some or all of the following:

- Media warnings (print and electronic)
- General warning indicators, for example sirens
- Warnings delivered to areas by community leaders or emergency services
- Dedicated automatic telephone warnings to at-risk properties
- Information about flooding and flood conditions in communities upstream. One approach to disseminating messages is to pass warning messages from village to village as the flood moves downstream
- Keep watch and be regularly informed about the river level and embankment conditions in the local area. The monitoring of the river and embankment should be increased as the water level increases and crosses the critical danger level
- A community-based warning system to pass any information about an approaching flood to every family.

3.3.2 Involvement of communities in data collection and local flood warning systems

If communities become involved in data collection for flood forecasting, and the importance of their role is understood, a sense of ownership is developed. Individuals can be appointed for the following tasks:

- Taking care of installations/ equipments
- Trained as gauge readers for manual instruments (rain gauges, water level recorders)
- Radio operators to report real-time observations

Trained individuals within the community should be able to gather and update information to:

- Know the depth of past severe floods in the local area
- Know the causes of flooding in the local area
- Know how quickly the waters might rise
- Know how long the floodwaters might remain in the locality
- Know the direction of movement of the floodwaters

The involvement of members of the community also helps to prevent vandalism and damage to installations going unreported.

3.3.3 Procedure for disseminating warnings to remote areas

Communities in remote areas may not be able to receive the types of warnings described in the previous section. Responsibilities need to be defined clearly for lower tiers of administration and the emergency services to have predefined links with communities in remote areas.

This should include;

- Local radio, which should be supplied with clear and accurate information
- Use of appointed community wardens with direct two-way radio or mobile telephone access to warning agencies and emergency authorities
- Local means of raising alarms, for example church bells, sirens, loud hailers, loudspeakers etc. The latter could be the responsibility of selected individuals or wardens, who need to be provided with equipment and transport, for example motor cycles or bicycles;
- 'Sky Shout' from emergency service helicopters.
- Doordarshan and the local cable channels (TV channels & radio Channels including FM radio)
- Bulletins in the Press
- Satellite Based disaster Warning Systems
- Fax
- Telephone

3.4 Trigger Mechanism: Plan Activation

The flood response system will be activated on the occurrence of a heavy rain. The Relief Commissioner will activate all the Departments for emergency response including the State EOC. He will issue instructions to include the following details:

- Specify exact resources required
- The type of assistance to be provided
- The time limit within which assistance is needed
- The state, district or other contact persons/agencies for the provision of the assistance
- Other Task Forces with which coordination should take place

The state EOC and other control rooms at the state level as well as district control rooms should be activated with full strength.

Once the situation is totally controlled and normalcy is restored, the Relief Commissioner declares End of Emergency Response and issues instructions to withdraw the staff deployed in emergency duties.

3.5 Roles and Responsibilities

S. No.	Response To be Taken	Responsible Department
1.	Reporting the occurrence of flood to Relief Commissioner, MSDMA, Heads of line departments, Chief Secretary and Chief Minister's office and National Disaster Management EOC, GoI.	Deputy Commissioner/IFCD
2.	Establish communication links by alternate communication equipments like phone, radio etc. in state/district EOC and Block control rooms.	Deputy Commissioner/Relief & DM Department/IFCD
3.	Deployment of Mobile Emergency Communication Units to affected areas for establishing communication links.	Deputy Commissioner/Relief & DM Department/IFCD
4.	Verifying authenticity of flood from agencies like IMD, SSNL and also from Districts/Block control rooms.	IFCD
5.	Hold first meeting with Duty Officers	Relief Commissioner/ Deputy Commissioner
6.	Contact the Heads of all the line departments to reach State EOC	SEOC i/c
7.	Dispatch of Search & Rescue teams to the affected areas.	SDRF/Civil Defence/FES
8.	Make arrangements for the aerial survey of affected areas.	Relief & DM Department
9.	Instruct local administration to evacuate victims to safer sites	Relief Commissioner/ Deputy Commissioner
10.	Assess the condition of road network for quick mobilization of Emergency teams and resources to affected areas and take follow up steps.	PWD / Relief Commissioner/ Deputy Commissioner
11.	Maintain constant touch with National/District and Block EOCs	SEOC i/c

3.6 Distribution of activities among various state agencies in Manipur during Relief

S. No.	Response To be Taken	Responsible Department
1.	Providing temporary shelters to evacuated persons	Deputy Commissioner
2.	Providing food materials to the victims	CAF&PD Commissioner/ Deputy Commissioner
3.	Providing safe drinking water to the victims	PHED Commissioner / Deputy Commissioner
4.	Provision of hygienic sanitation facilities	PHED Commissioner / Deputy Commissioner
5.	Provision of health assistance	Director Health

S. No.	Response To be Taken	Responsible Department
		Services/CMO
6.	Clothing and utensils	Deputy Commissioner
7.	Relief camps	Deputy Commissioner
8.	Providing transport services to shelter sites	Deputy Commissioner/ Transport Commissioner/DTO

3.7 Relief

3.7.1 Short-term relief measures

- Food & nutrition
In an extreme flood situation, people lose standing crops and stored food grains. In such cases, free distribution of foods shall be made to avoid hunger and malnutrition. Wherever possible, dry rations should be distributed for home cooking.
- Water
Water supply is invariably affected in natural disasters. Availability of safe drinking water is very challenging particularly during floods. It must be ensured that affected people have adequate facilities and supplies to collect, store and use clear and safe water for drinking, cooking and personal hygiene.
- Health
During post disaster phase many factors increase the risk of diseases and epidemics because of overcrowding, inadequate quantity and quality of water, poor environmental and sanitary conditions, decaying biological matter, water stagnation, inadequate shelter and food supplies. There should be adequate supply of medicines, disinfectants, fumigants etc. to check outbreak of epidemics. It should be ensured that the medicines have not reached expiry date.
- Clothing & Utensils
The people affected by the disaster shall be provided with sufficient clothing, blankets etc. to ensure their safety and well-being. Each disaster-affected household shall be provided with cooking and eating utensils.
- Shelter
In case of flood, a large number of people are rendered homeless. In such situations shelter becomes a critical factor for survival and safety of the affected population. In view of this, flood affected people who have lost their houses, shall be provided sufficient covered space for shelter. Disaster-affected households shall be provided with necessary tools, equipment and materials for repair, reconstruction and maintenance for safe use of their shelter.
- Relief camp
Relief camps also provide *good temporary arrangements* for people affected by flood. Adequate numbers of buildings or open space should be identified where relief camps can be set up during emergency. The use of premises of educational

institutions for setting up relief camps should be encouraged. The requirements for operation of relief camps should be worked out in detail in advance. The temporary relief camps should have adequate provision of drinking water and bathing, sanitation and essential health-care facilities.

▪ Sanitation and Hygiene

Sanitation services are crucial to prevent an outbreak of epidemics in post disaster phase. Therefore a constant monitoring of any such possibilities needs to be carried out. It should be ensured that disaster-affected households have access to sufficient hygiene measures.

3.7.2 Interim Relief Measures

- Arrangements to be made for quick identification and maintenance of the records of disposal of dead bodies in the affected areas (Home Dept., Revenue Dept., Health Dept. and Local Authorities).
- Arrangements to be made to record the complaints of all persons reported missing. Follow up action in terms of verification of the report also needs to be made. (Home Dept.)
- District Magistrates and sub-divisional magistrates to be empowered to exempt the requirement of identification and post-mortem in case of mass casualties. DP may depute additional sub-divisional magistrates to expedite disposal of the dead bodies. (DP & Home Dept.)
- Unclaimed/unidentified dead bodies to be disposed off with the help of pre identified voluntary Agencies at the earliest after keeping their records. (Home Dept., Revenue Dept., Health Dept. & Local Bodies)
- Additional manpower to be deployed in the affected areas for supplementing the efforts of the local administration. (DP/GAD).
- Separate Cell to be established at state/district/Block level to coordinate with the NGOs and outside donor/aid agencies. (Planning Dept.)
- Regular meetings of the different stakeholders/departments should be organized at state level for sharing information, developing strategies for relief operations. (Relief Commissioner & Deputy Commissioners at District Level).
- DIPR to coordinate with the media to play a positive role in disseminating appropriate information to public and the government in order to facilitate the speedy recovery. (DIPR)

3.7.3 Assessment of Damage/Loss and Relief needs

- The Relief Commissioner to issue instructions to the Deputy Commissioners to provide the 'Need Assessment Report'. The Relief Commissioner should consolidate the same and to prepare 'State's Need Assessment Report'.
- The Relief Commissioner to issue instructions to the Deputy Commissioners to provide the 'Damage and Loss Assessment Report'. The Relief Commissioner to consolidate the same and to prepare 'State's Damage and Loss Assessment

Report' which will be useful in planning and implementing the relief operations for disaster victims.

- Adequate manpower, vehicles, stationery etc. should be provided to supplement the efforts for need/loss assessment. (Relief Commissioner & Revenue Dept.)
- The relief need assessment report should be provided by the Deputy Commissioners. (Relief Commissioner & Deputy Commissioners)
- Identification and demolition of dangerous structures in the affected areas to minimize further loss of life and injuries. (PWD, Revenue Dept and Local Bodies)
- Arrangements for distribution of gratuitous relief and cash doles. (Revenue Dept., RD & PR, MAHUD and Deputy Commissioners)
- Arrangements to be made for survey of human loss and distribution of ex-gratia relief to the families of deceased persons. (Relief & DM Deptt.)
- Teams to be formed and dispatched to the affected areas for detailed assessment of houses and property damage assessment. (Revenue Dept. and Local authorities)

Action Plan

for

Landslides

4. Action Plan for Landslide

4.1 Introduction:

90% geographical area of Manipur is hilly and highly susceptible to landslides. Earthquake and torrential rainfall can also trigger landslides. The state incurs huge losses in terms of delays occurring due to road blockades as a result of landslides. The purpose of this action plan for landslides is for immediate response with proper co-ordination from all agencies.

4.2 Associated Authority

The Nodal Department for controlling, monitoring and directing measures for organizing rescue, relief and rehabilitation is the Relief & DM Deptt. All other concerned Departments should extend full cooperation in all matters pertaining to the management of the landslide disaster whenever it occurs.

4.3 Disaster Declaration

The State Executive Committee (SEC) may declare any area where Landslide has occurred as disaster affected area on the recommendations of the State Relief Commissioner. The purpose of declaration of disaster is to organize effective response and mitigating the adverse effects of disaster.

4.4 4-stage warning system for Landslide

1.) Pre-Landslide Watch

The unexpected depressions/soil surface subsistence which can be noticed in the steep slopes could be considered as a warning for possibility of landslide. Heavy rainfall is the cause for landslide inducement in the state therefore status of rainfall could be monitored.

2.) Landslide Alert/Warning

It can be issued at least 48 hours prior to commencement of the bad weather after examination of the weather forecast. Also, warning may be issued viewing the land subsistence and rock fall in the area.

3.) Preparedness

If required, the habited landslide prone areas may be evacuated for safety measures. Appropriate signage on the roads to be installed by BRO/PWD warning the commuters for imminent danger of landslide.

4.) Post landslide

Local EOC and DDMA along with line departments like Irrigation and Flood Control, PWD, R&DM, PHE, Forest, Agriculture and Horticulture, Health, Animal Husbandry, etc need to assess the damage and provide immediate support to the affected area.

4.5 Plan Activation

After the pre landslide watch and landslide warning is issued, the DDMA and concerned line departments need to immediately activate their respective DDMP and departmental plans.

4.6 End of Disaster Declaration

Once the situation is totally controlled and normalcy is restored, the DDMA Chairman shall declare End of Emergency and issues instructions to withdraw staff deployed in emergency areas.

4.7 Roles and Responsibility

Time Frame	Sr. No	Task	Responsibility	Activity
Time = -48 - 0 hrs	1	Warning receipt and dissemination	IMD SEOC DDMA Line Deptts Local Authorities	<ul style="list-style-type: none"> Report the weather forecast, land subsistence and any other sign of slide activity. Alert all response teams in the area. Remain in constant touch with DEOC and SEOC.
Time = 0 hrs	1.	Review of situation and reporting	SEC DDMA	<ul style="list-style-type: none"> Instruct all heads of departments of the key line departments to activate their departmental plan and DDMP
Time = 0 + 24 hrs	1.	Review of situation and reporting	SEC DDMA	<ul style="list-style-type: none"> Work as per DDMP and departmental plan. Report to HODs and SSDMA on two hours basis.
Time = 24 + 48 Hrs	1.	Review of situation and reporting	SEC DDMA	<ul style="list-style-type: none"> Work as per DDMP and departmental plan. Report to HODs and SSDMA on 6 hours basis.

4.8 Immediate relief to be provided to the affected population

4.8.1 Short-term Relief Measures

- Search, rescue and medical assistance
 - Identification of areas where SAR Teams to be deployed
 - Coordination of SAR teams for their quick deployment in allotted areas
 - Provision of quick transport of SAR teams to affected areas.
 - The department of PWD, R&DM, BRO to evolve a mechanism for clearing access routes in order to facilitate search and rescue operations.
 - Mobilization of specialized equipments and machinery to affected areas.
 - Cordoning of affected areas with control of entry and exit.
 - Traffic Management by establishment of traffic points and check-posts.
 - The Home Department to evolve a mechanism for providing security of properties of government and public in the affected areas.
- Emergency relief (shelter, food, clothing, etc.)
 - Establishment of Temporary shelters for evacuees.
 - Ensuring provision of essential services as under:
 - Arrangement for food, clothing, blanket/bedding, drinking water, sanitation and hygiene, lighting arrangements and essential medicines.
 - Deployment of mobile hospitals in affected areas for treatment of victims.
 - Providing counselling services to the victims and their relatives.

- Ensure establishment of communication link between the affected people and their relatives outside.
- The DDMA to ensure the following in the relief camps:
 - Special emphasis on Hygiene and sanitation aspects should be given in relief camp sites.
 - Separate area should be earmarked within the relief camp for storage of relief materials.
 - Adequate manpower and transport facilities for the camp site.
 - Arrangements to be made for trauma management.
 - Mobile medical units to be sent to remote areas with a view to provide medical assistance to the victims/injured.
 - Information centre should be established by the administration.

4.8.2 Interim Relief Measures

- Arrangements to be made for quick identification and maintenance of the records of disposal of dead bodies in the affected areas (DDMA and Local Authorities).
- Arrangements to be made to record the complaints of all persons reported missing. Follow up action in terms of verification of the report also needs to be made. (DDMA)
- District Magistrates and sub-divisional magistrates to be empowered to exempt the requirement of identification and post-mortem in case of mass casualties
- Unclaimed/unidentified dead bodies to be disposed off with the help of pre identified voluntary Agencies at the earliest after keeping their records. (DDMA & Local Bodies)
- Regular meetings of the different stakeholders/departments should be organized at state/district level for sharing of information, developing strategies for relief operations. (RC/DDMA)
- DIPR to coordinate with the media to play a positive role in disseminating appropriate information to public and the government in order to facilitate the speedy recovery.

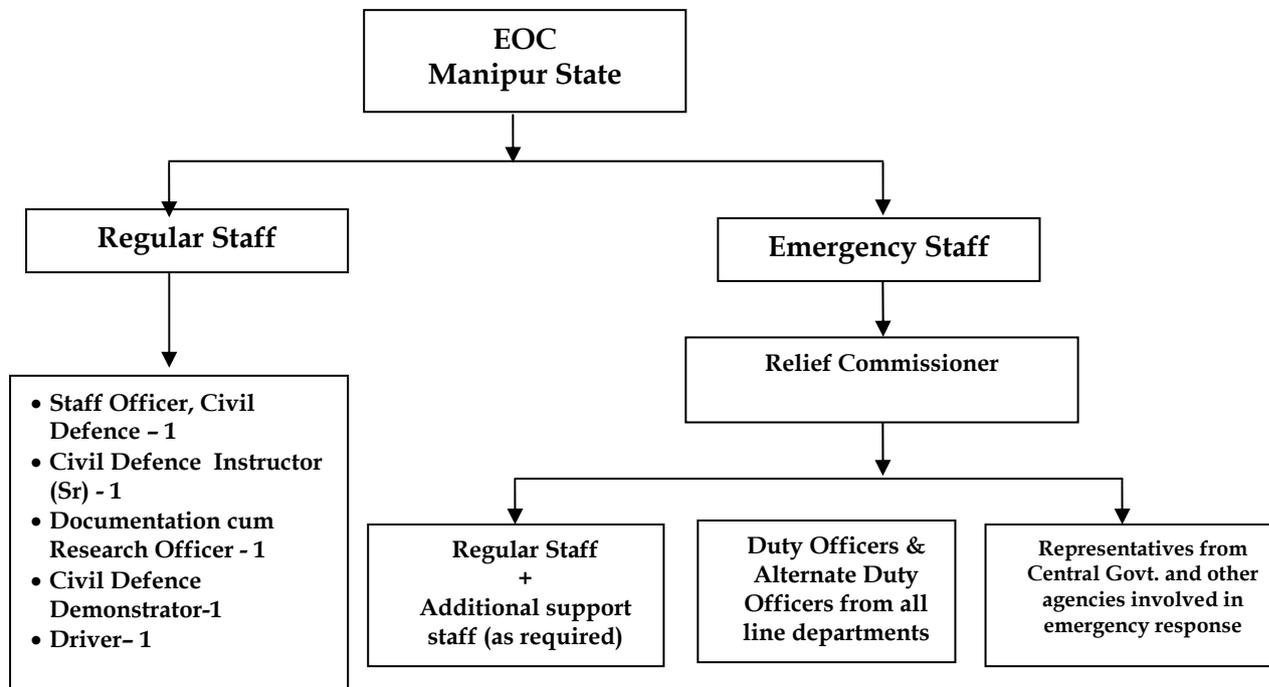
4.8.3 Assessment of Damage/Loss and Relief needs

- The RC to issue instructions to the Deputy Commissioners to provide ‘the need assessment’ report. The R&DM Deptt. should consolidate the same and to prepare “states need assessment report”.
- The RC to issue instructions to the Deputy Commissioners to provide the damage and loss assessment report. The R&DM Deptt. to consolidate the same and to prepare “state’s damage and loss assessment report” which will be useful in planning and implementing the relief operation after the disaster for the victims of the disaster.
- Adequate manpower, vehicles, stationery etc should be provided to supplement the efforts for need/loss assessment. (DDMA)
- The relief need assessment report should be provided by the Deputy Commissioners. (DDMA)
- Identification and demolition of dangerous structures in the affected areas to minimize further loss of life and injuries. (DDMA and Local Bodies)
- Arrangements for distribution of gratuitous relief and cash doles. (RC, DDMA, Local Authorities)

- Teams to be formed and dispatched to the affected areas for detailed assessment of houses and property damage assessment. (DDMA)

Annexure-1

Composition of Manipur State EOC



Note:

1. EOC will functions round the clock throughout the year with Regular Staff
2. EOC will be activated under the Relief Commissioner with emergency staff on report of earthquake or any other emergency