



District Disaster Management Plan-(DDMP)

Chhotaudepur

DISTRICT DISASTER MANAGEMENT AUTHORITY
Chhotaudepur

District Emergency Responce Center
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Dear citizens of Chhotaudepur,

I am pleased to introduce the District Disaster Management Plan (DDMP)-2024 for Chhotaudepur. This plan is designed to ensure the safety and well-being of our community during times of natural or man-made disasters. The DDMP aims to establish effective strategies, protocols, and resources to mitigate, prepare for, respond to, and recover from various emergencies that may arise. It accounts for potential hazards such as floods, earthquakes, cyclones, fires, and other unforeseen events.

Through extensive collaboration with governmental agencies, non-governmental organizations, community stakeholders, and experts in the field of disaster management, we have developed a comprehensive plan that encompasses various aspects, including early warning systems, evacuation procedures, medical assistance, relief measures, infrastructure resilience, and communication channels.

Our priority is to ensure the safety and well-being of every individual in Chhotaudepur. This plan focuses on proactive measures, empowering communities, and strengthening our capacity to face any potential disaster effectively.

We encourage all residents of Chhotaudepur to familiarize themselves with the DDMP, know their roles, and actively participate in disaster preparedness activities. Your involvement and cooperation are crucial in creating a resilient and safe environment for everyone.

The DDMP will be regularly reviewed and updated to align with changing circumstances and evolving needs. It is a dynamic document that takes into account lessons learned from past incidents, best practices, and the latest advancements in disaster management.

Let us come together as a united community, implementing this plan diligently, and fostering a culture of preparedness. By working together, we can build a resilient Chhotaudepur that can effectively respond to and recover from any disaster that comes our way.

Stay safe, stay prepared!

Sincerely,


Anil Dhameliya

Collector, Chhotaudepur

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Glossary of Key Terms

Capacity	The combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals.
Climate Change	The Inter-governmental Panel on Climate Change (IPCC) defines climate change as: " a change in the state of the climate that can be identified (e.g. by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcing or to persistent anthropogenic changes in the composition of the atmosphere or in land use".
Critical facilities/infrastructure	The primary physical structures, technical facilities and systems which are socially, economically or operationally essential to the functioning of a society or community, both in routine circumstances and in the extreme circumstances of an emergency.
Disaster	'Disaster' means a catastrophe, mishap, calamity or grave occurrence in an area, arising from natural or manmade causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of property, or damage to magnitude as to be beyond the coping capacity of the community of the affected area.
Disaster Management	'Disaster management' means a continuous and integrated process of planning, organizing, coordinating and implementing measures which are necessary or expedient for- Prevention of danger or threat of any disaster, Mitigation or reduction of risk of any disaster or its severity or consequences; Capacity building; Preparedness to deal with any disaster; Prompt response to any threatening disaster situation or disaster; Assessing the severity or magnitude

	of effects of any disaster; Evacuation, rescue and relief; Rehabilitation and reconstruction.
Disaster risk reduction	DRR is the concept and practice of reducing disaster risks through systematic efforts to analyses and manage the causal factors of disaster, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.
Early warning system	The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.
Exposure	People, property, systems, or other elements present in hazard zones that are thereby subject to potential losses.
Hazard	A dangerous phenomenon, substances, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social or economic disruption, or environmental damage.
Mitigation	The lessening or limitation of the adverse impacts of hazards and related disasters.
Preparedness	The Knowledge and capacities developed by governments, professionals response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.
Prevention	The outright avoidance of adverse impacts of hazards and related disasters.
Recovery	The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster affected communities, including efforts to reduce disaster risk factors.
Response	The provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure

	public safety and meet the basic subsistence needs of the people affected.
Risk	The combination of the probability of an event and its negative consequences.
Risk assessment	A methodology to determine the nature and extent of risk by analysing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend.
Structural and non-structural measures	<p>Structural measures : Any physical construction to reduce or avoid possible impacts of hazards or application of engineering techniques to achieve hazard-resistance resilience in structures or systems;</p> <p>Non-structural measures: Any measure not involving physical construction that uses knowledge, practice or agreement to reduce risks and impacts, in particular through policies and laws, public awareness raising, training and education.</p>
Vulnerability	The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard.

Abbreviations

GSDMA	:	Gujarat State Disaster management Authority
GSDMP	:	Gujarat State Disaster Management Plan
AAR	:	After Action Report
CBOs	:	Community Base Organizations
CWC	:	Central Water Commission
DM	:	Disaster Management
DDMA	:	District Disaster Management Authority
DPR	:	Detailed Project Report
DEOC	:	District Emergency Operation Centre
ESF	:	Emergency Support Function
EWS	:	Early Warning System
FLEWS	:	Flood Early Warning System
IMD	:	Indian Meteorological Department
IMO	:	Information and Media Officer
IAP	:	Incident action Plan
IRT	:	Incident Response Team
LO	:	Liaison Officer
NGOs	:	Non Governmental Organization
NDRF	:	National Disaster Response Force
SEC	:	State Executive Committee
SOP	:	Standard Operating Procedures
SAR	:	Search and Rescue
PRI	:	Panchayati Raj Institution

CHAPTER I: INTRODUCTION

Unique Features of Chhotaudepur District:

Chhota Udepur district is located in the eastern part of Gujarat, India. The district was carved out of the Vadodara district on August 15, 2013. The headquarters of the district is located in Chhota Udepur town. The district is mainly tribal-dominated and has a rich cultural heritage.

In terms of disasters, Chhota Udepur district experiences various natural calamities such as floods, droughts, and earthquakes. The district has a dedicated District Disaster Management Plan (DDMP) which provides for the effective management of disasters and emergencies. The DDMP focuses on five main areas: preparedness, response, recovery, mitigation, and prevention. The plan includes the identification of potential hazards, risk assessment, and the development of early warning systems.

The district administration has also taken steps for the capacity building of the local community and first responders. This includes the identification and training of volunteers, the formation of response teams, and the establishment of control rooms and communication networks. In recent years, Chhota Udepur district has made significant progress in disaster management, and the DDMP has been successful in mitigating the impact of various

disasters. The district administration continues to work towards the development of more effective disaster management strategies to ensure the safety and well-being of its citizens.

Chhota Udepur district has implemented various measures to mitigate the impact of floods in the area. Here are some key initiatives:

1. **Flood Early Warning Systems:**

The district administration has set up flood early warning systems to monitor weather conditions and water levels in rivers and reservoirs. This helps in timely forecasting and issuing alerts to vulnerable communities.

2. **Rescue and Relief Operations:**

The district has trained and equipped rescue teams to swiftly respond to flood situations. These teams, comprising personnel from the fire department, National Disaster Response Force (NDRF), and local volunteers, are deployed for rescue operations and provide immediate relief to affected people.

3. **Evacuation and Shelter Management:**

During flood events, the district administration carries out evacuation of people from vulnerable areas to safer places. Temporary shelters equipped with basic amenities are set up to accommodate displaced individuals and families.

4. River Dredging and Embankment Strengthening: To mitigate the impact of floods, the district has undertaken measures such as river dredging and strengthening of embankments. These activities help in improving the water-carrying capacity of rivers and reduce the chances of breaches.

5. Community Awareness and Preparedness: The district actively conducts awareness campaigns to educate the community about flood risks, preparedness measures, and evacuation procedures. This helps in building resilience and facilitating prompt actions during flood emergencies.

6. Coordination with Government Agencies: The district administration works closely with various government agencies, such as the irrigation department, revenue department, and disaster management authorities, to coordinate preparedness, response, and recovery efforts during flood events.

These initiatives reflect the district's proactive approach towards mitigating the impact of floods and ensuring the safety of its residents. Constant evaluation and improvement of flood management strategies help in minimizing loss of life, property, and infrastructure during such natural disasters.

Tribal Dominated: Chhotaudepur is Gujarat's third tribal-dominated district, with the Rathva community forming a significant part of the population. Their distinct culture includes the famous Rathvi dialect, Pithora art (vibrant wall paintings

depicting deities and animals), and rich folk traditions.

Natural Beauty: The district boasts a large forest area (over 75,000 hectares) and a beautiful lake surrounding Chhotaudepur town. This translates to scenic landscapes and potential for eco-tourism.

Mineral Resources: Chhotaudepur holds deposits of dolomite, fluorite, granite, and sand, making it a hub for mining activities. This contributes to the district's economy.

Historical Significance: The district has remnants of its royal past, evident in structures like the Kusum Vilas Palace and the Kali Niketan palace. These historical sites offer a glimpse into the region's heritage.

Thriving Dairy Industry: Chhotaudepur is known for its well-developed dairy industry, likely due to the focus on agriculture and animal rearing among the local communities.

Hazards and their Impact:

Deforestation: Mining and dependence on fuel wood could lead to deforestation, impacting the tribal communities reliant on forest resources and causing ecological imbalance.

Overgrazing: Large livestock populations for the dairy industry might lead to overgrazing, affecting vegetation cover and soil quality.

Mining Hazards: Improper mining practices can cause land

degradation, air pollution from dust, and potential water contamination.

Climate Change: The district's natural beauty and agriculture could be vulnerable to the effects of climate change, such as erratic rainfall patterns and increased temperatures.

These hazards can negatively impact the livelihoods of the people, damage property, and disrupt the ecological balance of the region. Sustainable practices in mining, forestry, and agriculture are crucial to mitigate these risks and preserve the unique character of Chhotaudepur.

Socioeconomic:

Tribal Dominance: The Rathva tribe forms a significant portion of the population, with a distinct culture and language. This influences social dynamics and traditions.

Developing Economy : The district is transitioning from an agrarian base to including mining and dairy industries.

Low Literacy Rates : Literacy rates, particularly among tribal communities, are below the national average.

Demographic:

High Population Growth : Chhotaudepur experiences rapid population growth, putting pressure on resources and infrastructure.

Rural-Urban Mix: The majority of the population resides in rural areas, with Chhotaudepur town being the main urban center.

Tribal Youth Out-migration: As educational opportunities increase, tribal youth might migrate to urban areas for better career prospects.

Critical Infrastructure:

Limited Infrastructure: The district faces challenges in terms of road connectivity, healthcare facilities, and educational institutions, particularly in rural areas.

Developing Power Grid: There's a need for improvement in power supply to support economic activities and household needs.

Water Scarcity: Some parts of the district experience water scarcity, impacting agriculture and daily life.

Key Resources:

Forest Wealth: Extensive forest cover provides habitat for wildlife, supports tribal communities, and holds potential for eco-tourism.

Mineral Resources: Deposits of dolomite, fluorite, granite, and sand contribute to the mining industry, but require sustainable practices.

Agricultural Land: Agriculture is a major source of income, with crops like wheat, maize, and pulses being cultivated.

Livestock: The district has a well-developed dairy industry due to a focus on animal rearing.

District Level:

Collectorate:

Headed by the District Collector (IAS officer), this is the central administrative body responsible for the overall governance of the district. It oversees various departments and ensures implementation of government policies.

Prant Offices:

These sub-divisions, headed by Deputy Collectors, handle revenue administration, land records, and disaster management within their designated areas.

Taluka Level:

Taluka Offices: Each of Chhotaudepur's six talukas (administrative sub-divisions) - Chhotaudepur, Jetpur Pavi, Kawant, Naswadi, Sankheda, and Bodeli - has a dedicated taluka office. These offices are managed by Mamlatdars and handle local administration, including public services, development projects, and grievance redressal.

Village Level:

Gram Panchayats: The village council or Gram Panchayat is the lowest tier of administration. It's a self-governing body elected by villagers and responsible for village-level development, sanitation, and basic amenities.

Sr.No	Perticullars	Value
1	Total Population	1,071,831
2	Urban Population	72,415 (6.76% of total)
3	Rural Population	999,416 (93.24% of total)
4	Sex Ratio	967 females per 1,000 males (slightly lower than national average)
5	Scheduled Tribes	856,862 people constituting 79.94% of the population.

Tribal Communities:

Rathva Tribe: The most prominent tribal community with its distinct culture and language.

Other Communities:

Scheduled Castes: 25,279 people, forming 2.36% of the population.

General Population: Approximately 190,000 people, constituting the remaining 17.7% of the population.

Additional Points:

The district experiences rapid population growth, putting pressure on resources and infrastructure.

Literacy rates, particularly among tribal communities, are below the national average.

It is already recognised that it is possible to take preventive, mitigation, preparedness measures along with the capacity building of the stakeholders so that the negative impact of a disaster can be minimized. Hence, there is a need for good planning.

Under the DM Act 2005, it is mandatory on the part of District Disaster Management Authority (DDMA) to adopt a continuous and integrated process of planning, organizing, coordinating and implementing measures which are necessary and expedient for prevention as well as mitigation of disasters. These processes are to be incorporated in the developmental plans of the different departments and preparedness to meet the disaster and relief, rescue and rehabilitation thereafter, so as to minimize the loss to be suffered by the communities and are to be documented so that it is handy and accessible to the general public.

1.1 Aims and Objectives of the Plan:

The overall goal of a disaster management plan for Chhotaudepur district would be to minimize the loss of life, property, and livelihoods in the event of a natural disaster. This can be achieved through a multi-pronged approach:

1. Risk Reduction:

Hazard Identification and Assessment: Identify potential hazards specific to Chhotaudepur, such as floods, droughts, earthquakes, or heatwaves. Analyze their likelihood and potential impact on different areas and communities.

Vulnerability Mapping: Identify areas and communities most vulnerable to specific hazards, considering factors like geographical location, housing structures, and access to resources.

Promoting Sustainable Practices: Encourage practices that reduce disaster risks, such as deforestation control for flood mitigation or drought-resistant crop cultivation.

2. Preparedness:

Develop Early Warning Systems: Implement systems to provide timely warnings to communities about impending disasters. This could involve weather monitoring stations, flood forecasting, and communication networks.

Evacuation Plans and Shelters: Develop clear evacuation plans for vulnerable areas and establish

designated emergency shelters with adequate supplies.

Stockpiling of Essential Supplies:

Maintain a stockpile of essential supplies like food, water, medicine, and sanitation kits to meet immediate needs after a disaster.

Public Awareness and Training:

Educate communities on disaster preparedness measures, including evacuation drills, first-aid training, and safe practices during different disasters.

3. Response:

Effective Communication Network

: Establish a robust communication network to coordinate response efforts among different departments, NGOs, and volunteers.

Rapid Response Teams: Train and equip dedicated first responders for search and rescue operations, medical aid, and damage assessment.

Resource Mobilization: Develop a plan to mobilize resources like personnel, equipment, and supplies from within the district and potentially from external sources.

4. Recovery and Reconstruction:

Damage Assessment: Assess the extent of damage to infrastructure, housing, and livelihoods after a disaster.

Rehabilitation Programs: Develop programs to provide financial assistance, temporary housing, and livelihood restoration support to affected communities.

Reconstruction Efforts: Plan for the reconstruction of damaged infrastructure in a way that is more resilient to future disasters (e.g., building codes that consider earthquake risks).

The objectives of a disaster management plan for Chhotaudepur district would likely focus on several key areas considering the district's unique features and vulnerabilities:

Risk Reduction and Preparedness:

Hazard Mapping and Assessment: Identify and map areas susceptible to different types of disasters like floods, droughts, earthquakes, and heatwaves. Analyze potential impacts on infrastructure, population, and resources.

Community Awareness and Training: Educate residents, particularly in vulnerable areas, about disaster preparedness measures, early warning systems, and evacuation procedures. Conduct regular drills and mock exercises to ensure community response readiness.

Strengthening Infrastructure: Upgrade critical infrastructure like roads, bridges, dams, and communication networks to withstand potential disasters. This could include flood-proofing measures and designing buildings with disaster resilience in mind.

Mitigation and Response:

Develop a Rapid Response Mechanism: Establish a well-coordinated response system involving government agencies, NGOs, and local communities for immediate deployment of rescue teams, medical aid, and essential supplies in the aftermath of a disaster.

Stockpiling of Essential Supplies: Maintain a readily available stock of food, water, medicines, and other essential supplies to meet immediate needs during a disaster.

Communication and Evacuation Plans: Formulate clear communication protocols to disseminate timely warnings and evacuation orders. Establish designated evacuation centers with essential amenities for displaced people.

Recovery and Rehabilitation:

Post-Disaster Needs Assessment: Evaluate the damage caused by the disaster and identify immediate and long-term needs for reconstruction and rehabilitation.

Livelihood Restoration: Implement programs to help affected communities rebuild homes, businesses, and agricultural livelihoods.

Psychological Support: Provide counseling and mental health services to individuals and communities traumatized by the disaster.

Focus on Vulnerable Groups:

Tribal Community Safety: Develop specific strategies to address the unique vulnerabilities of tribal communities residing in remote areas or relying on forest resources. This could involve targeted awareness campaigns and evacuation plans considering their traditional settlements.

Disaster-proof Housing: Prioritize building safe and resilient housing for low-income communities and those residing in high-risk zones.

Sustainability and Risk Reduction:

Promote Environmental Management: Integrate disaster risk reduction strategies into development plans, focusing on sustainable forestry practices, responsible mining, and water management to address climate change-related vulnerabilities.

Invest in Early Warning Systems: Develop and maintain efficient early warning systems that can provide timely alerts about impending disasters, allowing for preventative measures and evacuation.

By addressing these objectives, a comprehensive disaster management plan can significantly improve Chhotaudepur's preparedness and response capabilities, minimizing the impact of disasters on lives, property, and the overall well-being of the district.

1.2 Scope of the Plan:

The scope of this plan, the entities (e.g., departments, agencies, PRIs,

ULBs, private sector, NGOs, citizens) and geographic areas to which the plan applies need to be stated explicitly with identified role and responsibilities. The purpose statement need not be complex but should include enough information to establish the direction for the plan. The scope should include all disaster phases (Prevention, Preparedness, Mitigation, Response and Recovery), hazards addressed, area / district etc.

Section 31 of Disaster Management Act 2005

1.2 Authority and Reference:

This Plan is in accordance with Sections 31 and 32 of the DM Act 2005. Include and cite the legal and administrative basis for evolution of the Plan and implementing DDMP including:

Laws & Statutes (DM ACT 2005)

The Disaster Management Act, 2005 (DM Act 2005) provides institutional and coordinating mechanisms for effective disaster management at national, state, district and local level. Essentially, the Government of India formulated a multi-level institutional system, in which National Disaster Management Authority (NDMA), headed by the Prime Minister, State Disaster Management Authority (SDMA) headed by Chief Minister and District Disaster Management Authority (DDMA) under the chairmanship of District Collectors and local bodies are chaired by co-chairing.

Disaster is the result of natural or man-made causes; this creates serious disruption in the functioning of a society, thereby causing massive harm to humans, physics or the environment. The social and economic protection procedures available to cope with are inadequate, so the dangerous distress is actually a disaster.

All possible natural and manmade disasters have been included in the

District Disaster Management Plan. The plan has been described for prevention and control of various disasters. This District Disaster Management Plan has been prepared as per the guidelines given by National Disaster Management Authority.

It is divided into 4 sections.

In section 01, the background of the district, the sensitivity of the disaster in the district, the capacity and the risk assessment, with the planning requirements, objectives of the plan, the brief introduction of the district, identification of potential disasters of the district, risk analysis and disasters in the district like drought, floods, accidents, epidemics etc. have been shown. Under the institutional arrangements, the structure of disaster management, from the district level to the gram panchayat level, the formation process of the Disaster Management Committee and information of the District Emergency Operations Center is shown.

Section 02 is divided into category of prevention, preparedness, training, structural and nonstructural capacity building during the disaster In which general preparedness and mitigation plan, establishment of control room, renewal of plans, communication

system, training for members of disaster management team, community awareness on various disasters, As well as in the case of immediate pre-disaster, during disaster and post disaster coordination mechanism of the District Disaster Management Authority has been included. Based on the potential disaster in the district, structural and non-structural prevention measures, disaster risk reduction plan, institutional capacity building, the role and responsibilities of each department are shown.

Section 3 has included the standard operating procedure for the implementation of the Disaster Management Plan and various departments at the time of disaster. In this plan, pre disaster relief and rehabilitation, relief and rehabilitation during disaster and with the post disaster relief and response, the reconstruction and rehabilitation process has been shown.

Financial resources for district disaster management scheme and other

financial resources at the district level, inspection, evaluation and evaluation of district disaster management plan and coordination mechanism for organizing and implementing Mock Drill at district level has been mentioned.

In section 4, in accordance with District Disaster Management Plan, in order to deal with the situation of any emergency, information related to various departments such as contact list, vehicle list, health centers, police stations, list of fire brigade, as well as areas in the disaster prone areas of the district Maps, etc. have been included. Coordination and coordinated mechanism has been mentioned. This plan is useful in the form of guidance for better coordination, organizing and implementation of district administration, other stakeholders before disaster and after disaster. This plan guides the process mechanism operating in relief work and increases the community capacity to deal with the disaster. The District Disaster Management Plan has been conceived as a preparedness plan, which is activated only after getting information about the disaster and makes the reaction mechanism functioning without losing any time.

1.3 Evaluation of The Plan in brief:

To evaluate the District Disaster Management Plan (DDMP) of Chhotaudepur as per the guidelines provided by the National Disaster Management Authority (NDMA), several key aspects need to be considered. Here's a structured evaluation framework:

Comprehensive Risk Assessment:

Review the methodology used for risk assessment including hazards identification, vulnerability analysis, and exposure assessment.

Assess whether all potential hazards specific to the district have been adequately identified and analyzed.

Evaluate the accuracy and relevance of data used in the risk assessment process.

Institutional Framework:

Examine the organizational structure established for disaster management at the district level.

Evaluate the roles, responsibilities, and coordination mechanisms of various departments and stakeholders involved in disaster management. Assess the clarity of roles and responsibilities of District Disaster Management Authority (DDMA), District Emergency Operation Center (DEOC), and other relevant bodies.

Legal and Policy Framework:

Check the alignment of the DDMP with national and state-level disaster management policies, guidelines, and legal frameworks. Evaluate the extent to which the plan incorporates provisions from the Disaster Management Act, 2005, and other relevant legislations.

Preparedness and Response Strategies:

Review the preparedness measures outlined in the plan, including early warning systems, evacuation plans, and stockpiling of essential supplies.

Evaluate the effectiveness of response strategies for various types of disasters, considering factors such as resource availability, coordination mechanisms, and community involvement.

Capacity Building and Training:

Assess the arrangements made for capacity building and training of personnel involved in disaster management.

Evaluate the inclusion of training programs for first responders, volunteers, and community members to enhance their preparedness and response capabilities.

Community Participation and Awareness:

Evaluate the extent of community participation in the development of the DDMP and its implementation.

Assess the effectiveness of communication and awareness-raising activities aimed at informing the public about disaster risks, preparedness measures, and response protocols.

Integration of Cross-cutting Issues: Evaluate the incorporation of cross-cutting issues such as gender, disability, and environmental concerns into the DDMP. Assess the measures taken to address the specific needs and vulnerabilities of marginalized groups in disaster risk reduction and response.

Monitoring, Evaluation, and Revision Mechanisms: Review the provisions for monitoring and evaluation of the DDMP's implementation progress and effectiveness. Assess the mechanisms in place for regular review and revision of the plan to ensure its relevance and effectiveness in addressing evolving disaster risks.

By systematically evaluating these aspects, one can provide a comprehensive assessment of the District Disaster Management Plan of Chhotaudepur in alignment with the guidelines provided by the NDMA.

1.4 Stakeholders and their responsibilities

At State HQ level - the State Disaster Management Authority and the Office of the Commissioner of Relief (CoR), Revenue Department, are the major institutions in the State that deal with all the phases of disaster management. All the major line departments of the State Government and the emergency support function agencies converge into SEOC during disasters.

At the District level, District Disaster Management Authority, with the District Collector designated as Response Officer (RO), and other line departments at district HQ are responsible to deal with all phases of disaster management within district.

Other technical institutions, community at large, local self-governments, NGOs etc. are also stakeholders of the District Disaster Management Pan.

The role of the stakeholders has been prepared with the sole objective of making the concerned organizations understand their duties and responsibilities regarding disaster management at all levels and accomplishing them.

The District Collector has the following duties:

To facilitate and coordinate with local Government bodies to ensure that pre and post disaster management activities in the district are carried out.

To assist community training, awareness programmes and the installation of emergency facilities with the support of local administration, non-governmental organizations and the private sector.

To function as a leader of the team and take appropriate actions to smoothen the response and relief activities to minimize the adverse impact of disaster.

To recommend the Commissioner of Relief (CoR) and State Government for declaration of disaster.

Local Authorities have the following duties:

To provide assistance to the District Collector in disaster management activities.

To ensure training of its officers and employees and maintenance of resources so as to be readily available for use, in the event of a disaster.

Private Sector:

i. The private sector should be encouraged to ensure their active participation in the pre- disaster activities in alignment with the overall plan developed by the DDMA or the Collector.

ii. They should adhere to the relevant rules regarding prevention of disasters, as may be stipulated by relevant local authorities.

To undertake capacity building measures and awareness and sensitization of the community

To ensure that all construction projects under it conform to the standards and specifications laid down.

Each department of the Government in a district shall prepare a disaster management plan for the district. The local authorities need to ensure that relief, rehabilitation and reconstruction activities in the affected area, within the district, are carried out.

Trust / Organisations managing Places of Worships & Congregation

Each establishment / organisation identified as —critical infrastructure and key resource, Including places of congregation in a district shall prepare —on-site and —off-site Disaster management plan. Carry out mitigation, response, relief, rehabilitation and Reconstruction activities

iii. As a part of CSR, undertake DRR projects in consultation with district collector for enhancing district's resilience.

Community Groups and Volunteer Agencies:

- i. Local community groups and voluntary agencies including NGOs
- ii.

1.5 How to use the Plan:

Section 31 of DM Act 2005 makes it mandatory for every district to prepare a disaster management plan, for the protection of life and property from the effects of hazardous events within the district.

In significant emergencies or disasters, District Magistrate or the chairperson of DDMA will have the powers of overall supervision direction and control as may be specified under State Government Rules / State Disaster Management Plan guidelines.

The district EOC will be staffed and operated as the situation dictates. When activated, operations will be supported by senior officers from line departments and central government agencies; private sector and volunteer organizations may be used to provide information, data and resources to cope with the situation.

The DDMA may recommend for action under Sec 30 of DM Act.

Facilities that have been identified as vital to operation of the district government functions have been identified.

The DM or his designee will coordinate and control resources of the District.

Emergency public information will be disseminated by all available media outlets through the designated media and information officer.

Prior planning and training of personnel are prerequisites to effective emergency operations and must be considered as integral parts of disaster preparations.

Coordination with surrounding districts is essential, when an event occurs, that impacts beyond district boundaries. Procedure should be established and exercised for inter district collaboration.

Departments, agencies and organizations assigned either primary or supporting responsibilities in this document must develop implementation documents in order to support this plan.

When local resources prove to be inadequate during emergency operations, request for assistance will be made to the State or higher levels of government and other agencies in accordance with set rules and procedures.

District authority will use normal channel for requesting assistance and/or resources, i.e., through the District Emergency Operations Center (DEOC) to the State EOC. If state resources have been exhausted, the state will arrange to provide the needed resources through central assistance.

The District EOC will coordinate with the State EOC, Agencies of the Govt. of India like IMD / CWC to maintain upto-date information concerning potential flooding, cyclones etc. As appropriate, such information will be provided to the citizens of the affected areas in the district.

Upon receipt of potential problems in these areas, DEOC / designated officials will appropriately issue alert and notify action to be taken by the residents.

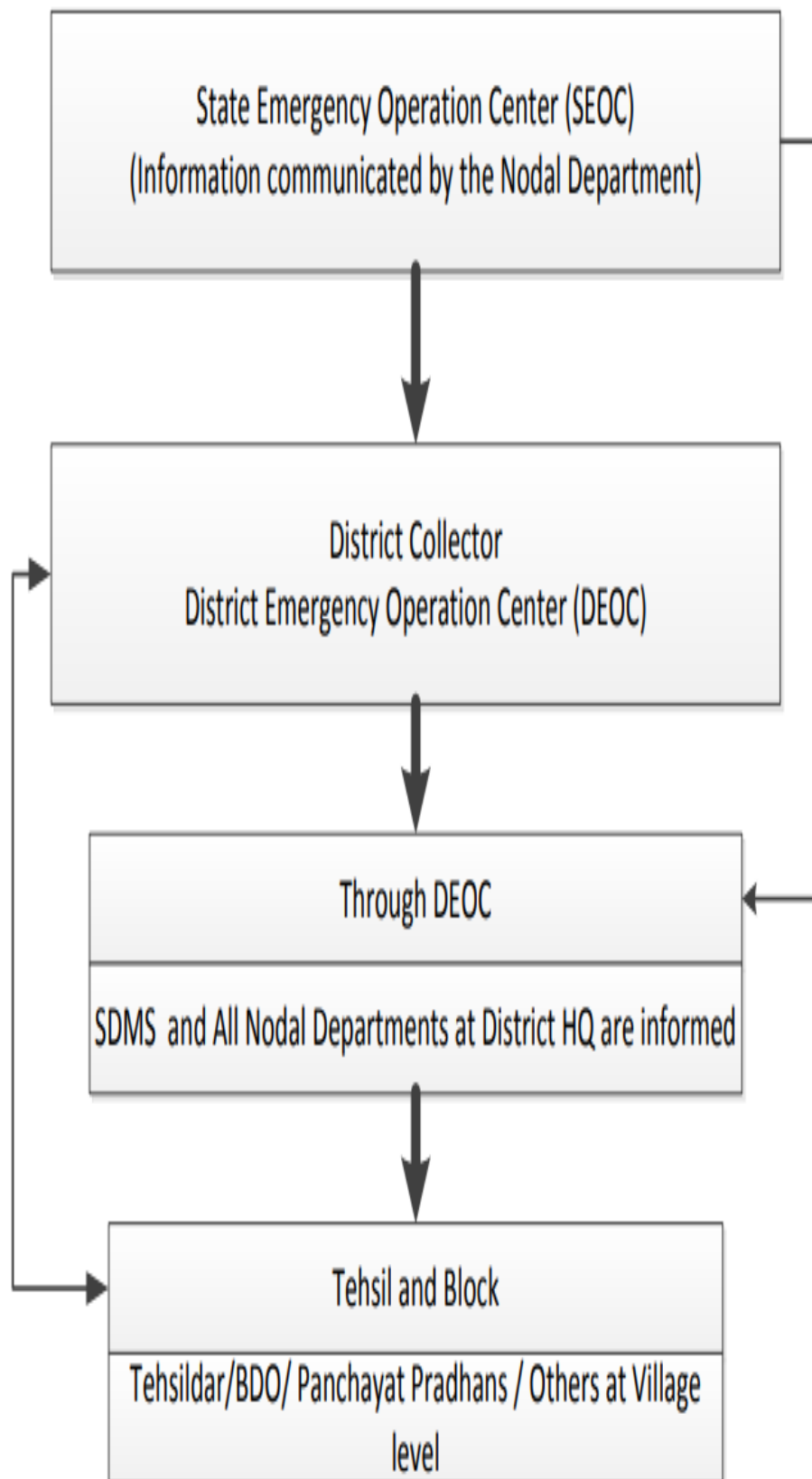
Disaster occurrence could result in disruption of government functions and, therefore, all levels of local government and their departments should develop and maintain procedures to ensure continuity of Government action.

It is necessary that for suo-moto activation of the agencies involved in the disaster management, the institutional trigger mechanism should be there so that every agency takes its assigned role at the time of such disaster. There will be three types of Trigger mechanism that will be set up depending upon the

warning signals availability as mentioned below:

Warning Signal Available:

In such case the Govt. of India / State Govt. has authorized agencies generating such early warning signals; in case the matter is very urgent needing action at Block/Tehsil/Village levels, the alerts and action points will go directly to all concerned. Arrangements need to be in place to ensure prompt receipt of these signals and action thereon. After such warning/advisory received by the State Govt., the SEOC will communicate it to the DEOC urgently. The DEOC will communicate such warning to the departments at the district level. The information flow in such cases will be as follows:-



Without Early Warning Signal:

When disaster occurs without any early warning in that case the information starts from the place of incident through government agency or otherwise and the institutional mechanism in such cases will be as follows:-

i. The concerned village will report to the Panchayat, block, police station/SDM/DM and the information will be sent to the Deputy Commissioner.

ii. DDMA will assess the information and assess the disaster to be of the level L0, L1, L2 or L3.

iii. DEOC will be activated and if required the SEOC will be kept at alert if assistance needed; otherwise information of the incident will be passed on to SCOC.

iv. DDMA will convene the meeting of DEOC and plan the management of the disaster as Incident Response Plan.

v. The respective Incident response teams will be rushed to the site for effective management.

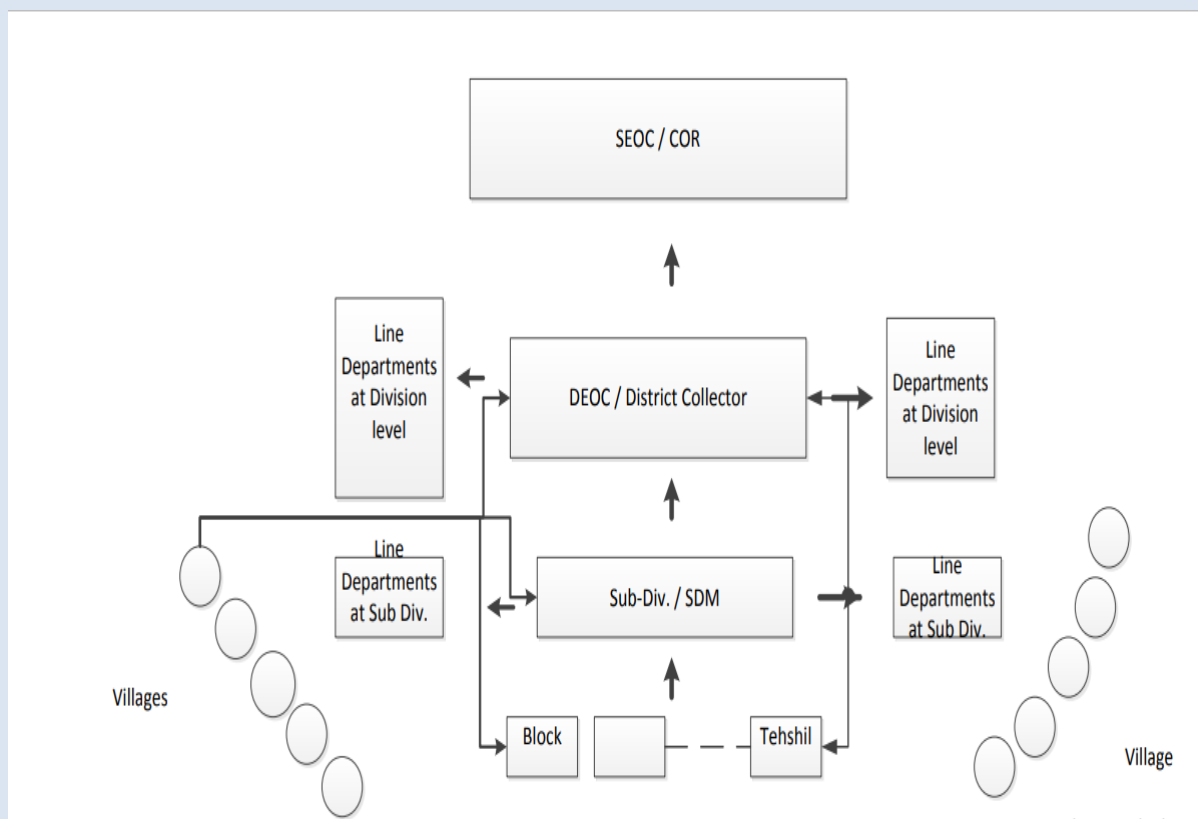


Figure 2: Without Warning – Information, generally, should flow from Bottom side – up but it is a crisscross scenario.

The disaster response structure will be activated on the receipt of a disaster warning or on the occurrence of a disaster by the competent authority. The occurrence of a disaster may be reported by the concerned monitoring authority to the Commissioner of Relief/SDMA by the fastest means. The SDMA/SEC will activate all departments for emergency response including the State EOC, District EOC, police personnels and ERCs. In addition, they will issue instructions to include the following details:

- i. Exact quantum of resources (in terms of manpower, equipments and essential items from key departments/stakeholders) that is required.
- ii. The type of assistance to be provided.
- iii. The time limit within which assistance is needed.
- iv. Details of other Task/Response Forces through which coordination should take place.
- v. The State EOC, ERCs and other control rooms at the State level as well as district control rooms should be activated with full strength.

1.7 Approval Mechanism of the Plan:

As defined in Section 30 of DM Act 2005, DDMA shall act as the district planning;

coordinating and implementing body for disaster management and take all

measures for the purpose of disaster management in the district in accordance with the guidelines laid down by the National Authority and the State Authority.

Accordingly, the District DM plan shall be prepared by the District Authority, after consultation with the local authorities and having regard to the National DM Plan and the State DM Plan.

1.8 Plan review and updation periodicity:

Training- After developing a plan, it must be disseminated and managers must be required to train their personnel so that they have the knowledge, skills and abilities needed to perform the tasks identified in the plan. Personnel should also be trained on the organization-specific procedures necessary to support those plan tasks.

Exercise the Plan - Evaluating the effectiveness of plan involves a combination of training events, exercises and real-world incidents to determine whether the goals, objectives, decisions, actions and timing outlined in the plan led to a successful response. The purpose of an exercise is to promote preparedness by testing policies plans and training personnel.

Revise and Maintain - Planning teams should establish a process for reviewing and revising the plan. Reviews should be a recurring activity. Review on an annual basis is

considered minimum. It should be mandatory to consider reviewing and updating the plan after the following events:

- i. A major incident.
- ii. A change in operational resources (e.g., policy, personnel, organizational structures, Management processes, facilities, equipment).
- iii. A formal update of planning guidance or standards.
- iv. Each activation.
- v. Major exercises.
- vi. A change in the district's demographics or hazard or threat profile.

vii. The enactment of new or amended laws or ordinances.

The responsibility for the coordination of the development and revision of the basic plan, annexes, appendices and implementing instructions must be assigned to the appropriate person(s).

It is recommended that a DDMP be internally reviewed on a yearly basis and either be updated or reaffirmed. The updates or reaffirmed document may also be used to summarize the accomplishments of the past year and help the administration to prioritize mitigation goals for the next year

CHAPTER 2:

HAZARD, VULNERABILITY, CAPACITY AND RISK ASSESSMENT

Based on the information and considering Chhotaudepur's specific context, here's a breakdown of its potential hazards, risks, and vulnerabilities:

Hazards:

Floods: Chhotaudepur experiences heavy monsoon rainfall, making it susceptible to flash floods and riverine flooding.

Preparedness: Flood hazard mapping: Identify floodplains, inundation zones, and areas with high flood risk using topographical data and historical records.

Early warning system: Implement a robust early warning system that combines weather monitoring, river level monitoring, and community-based alerting mechanisms. This system should disseminate timely warnings through sirens, public announcements, and SMS/telephone alerts.

Public awareness campaigns: Educate communities about flood risks, preventive measures, evacuation procedures, and safe haven locations. Conduct mock drills to familiarize residents with the evacuation process.

Flood control measures: Explore measures to manage floodwaters like constructing embankments, de-silting rivers, and promoting natural drainage systems.

Response: Emergency response teams: Train and equip emergency response teams (police, fire department, NDRF) for flood rescue and relief operations.

Evacuation plans: Develop comprehensive evacuation plans for vulnerable communities, including transportation arrangements, designated evacuation routes, and safe haven locations outside floodplains.

Communication plan: Establish a clear communication plan to ensure real-time information sharing between government agencies, emergency responders, and the public.

Stockpiling of essential supplies: Maintain a stockpile of essential supplies like food, water, medicines, and sanitation kits to meet the needs of displaced communities.

Recovery: Damage assessment: Conduct a rapid damage assessment after the flood event to evaluate the

extent of damage to infrastructure, housing, and agriculture.

Relief distribution: Ensure efficient distribution of relief materials like food, clothing, and temporary shelters to affected communities.

Rehabilitation and reconstruction: Develop a plan for long-term rehabilitation and reconstruction efforts, including repairing damaged infrastructure, providing financial assistance for rebuilding homes and livelihoods, and implementing measures to build back better with flood resilience in mind.

Additional Considerations:
Community participation: Actively involve communities in all stages of flood preparedness, response, and recovery.

Vulnerable populations: Pay particular attention to the needs of vulnerable groups like children, elderly, and people with disabilities during evacuations and while providing relief assistance.

Livelihood restoration: Support the revival of local businesses and agricultural activities to restore livelihoods affected by the floods.

Insurance: Encourage residents to consider flood insurance to mitigate financial losses.

Droughts: Erratic rainfall patterns and depleting water resources pose drought risks.

Preparation: Monitoring and Early Warning:

Establish a robust system to monitor rainfall patterns, soil moisture levels, and reservoir water levels.

Issue timely drought advisories to farmers and the public, informing them of the severity and expected duration of the drought.

Water Conservation:

Promote water conservation practices in agriculture, such as drip irrigation, mulching, and using drought-resistant crops.

Encourage rainwater harvesting at the community and individual household level.

Repair and maintain canals and irrigation systems to minimize water loss.

Resource Management:

Develop a plan for prioritizing water allocation during droughts, considering drinking water, sanitation, agriculture, and industrial needs.

Identify alternative water sources, such as groundwater or desalination plants, for critical needs during droughts.

Response: Drought Relief Measures:

Implement a financial assistance program for farmers who suffer crop losses due to drought.

Provide subsidized fodder and water for livestock.

Organize water distribution camps in drought-affected areas.

Social Safety Measures:

Identify vulnerable communities most affected by droughts and target them for relief efforts. This might include elderly people, single-parent households, and marginal farmers.

Provide employment opportunities through drought-relief programs like building water conservation infrastructure.

Recovery: Impact Assessment:

Assess the overall impact of the drought on agriculture, livestock, water resources, and the economy.

Long-term Mitigation Strategies:

Invest in drought-resistant crop varieties and precision agriculture techniques.

Explore drought-proofing measures like building reservoirs or improving groundwater recharge.

Raise awareness about water conservation practices and promote community-based water management initiatives.

Additional Considerations:

Community Participation: Actively involve farmers, community leaders, and NGOs in planning and implementing drought mitigation strategies.

Public Awareness: Disseminate information about drought preparedness, water conservation techniques, and available government assistance programs.

Interdepartmental Coordination: Ensure smooth coordination between different government departments like agriculture, water resources, and disaster management for effective response

Earthquakes: Located in a seismically active zone 2 and 3, Chhotaudepur is vulnerable to earthquakes.

Preparedness: Hazard assessment:

Conduct a thorough assessment of earthquake risks in Chhotaudepur. This would involve:

Identifying seismic zones within the district.

Evaluating soil stability and potential liquefaction zones (areas where soil loses strength during an earthquake).

Mapping critical infrastructure like hospitals, schools, and dams to assess their vulnerability.

Building codes and enforcement:

Implement and enforce stricter building codes for earthquake-resistant construction. This might involve: Mandatory use of earthquake-resistant materials and techniques in new constructions. Retrofit programs to strengthen existing buildings, especially critical infrastructure.

Public awareness campaigns:

Educate residents about earthquake safety measures, including:

Drop, Cover, and Hold On drills practiced regularly in schools, workplaces, and communities.

Safe evacuation routes from homes and buildings.

Educating residents about potential earthquake hazards like fires, gas leaks, and landslides.

Community preparedness programs:

Organize community preparedness programs that include: Training on basic first aid and search and rescue techniques for volunteers.

Stockpiling of emergency supplies like food, water, and first-aid kits at designated locations.

Response:

Emergency response plan: Develop a comprehensive emergency response plan that outlines actions for immediate response after an

earthquake. This plan would include: Activation of emergency operation centers.

Deployment of search and rescue teams to locate trapped survivors. Provision of medical aid to the injured. Damage assessment and identification of critical needs.

Communication plan: Establish a robust communication plan to ensure information flow during and after an earthquake. This would involve:

Backup communication systems in case of primary channels failing.

Designation of official information channels to prevent rumors and panic.

Recovery: Reconstruction plan:

Develop a plan for reconstruction and rehabilitation after an earthquake. This would involve:

Debris removal and temporary sheltering of displaced residents.

Financial assistance for rebuilding damaged homes and infrastructure.

Psychological support for those affected by the earthquake.

Additional Considerations:

Vulnerability of specific populations: Identify and address the needs of vulnerable populations like children, elderly, and people with disabilities

during all stages of preparedness, response, and recovery.

Mock drills: Conduct regular mock drills to test the response plan and ensure all stakeholders are familiar with their roles.

Inter-agency coordination: Establish clear lines of communication and coordination between different government agencies, NGOs, and volunteers.

Heatwaves: Rising temperatures and climate change pose heatwave risks.

Preparedness:

Early Warning System:

Develop a system to monitor temperatures and forecast heatwaves.

Issue timely warnings through multiple channels like television, radio, SMS, social media, and community loudspeakers.

Classify warnings based on severity (mild, moderate, severe) to guide appropriate action.

Public Awareness Campaigns:

Educate people about heatstroke symptoms, preventive measures, and first-aid steps.

Promote use of cool spaces and proper hydration during heatwaves.

Target campaigns towards vulnerable groups like children, elderly, outdoor workers, and those with underlying health conditions.

Community Outreach Programs:

Identify vulnerable populations within communities.

Organize mobile medical camps in high-risk areas during heatwaves.

Partner with NGOs to distribute water bottles, hats, and cooling cloths to vulnerable groups.

Response: Cooling Centers:

Establish temporary cooling centers in public buildings like schools, community centers, and libraries.

Equip these centers with proper ventilation, water, and first-aid supplies.

Ensure accessibility for people with disabilities.

Public Utility Management:

Ensure uninterrupted power supply to hospitals and essential service facilities. Prioritize water supply to avoid shortages during heatwaves.

Recovery: Heatstroke Management

:Train medical personnel to identify and treat heatstroke cases effectively. Stock hospitals with necessary supplies and medications.

Post-Heatwave Assessment:

Analyze the effectiveness of the response measures. Identify areas for improvement for future heatwave events.

Additional Considerations:

Heat Action Plan: Develop a district-specific Heat Action Plan outlining specific actions based on the severity of the heatwave.

Inter-departmental Coordination:
Ensure smooth collaboration between various departments like health, education, local

administration, and power supply during heatwaves.

Resource Allocation: Allocate sufficient budget and resources for heatwave preparedness, response, and recovery activities.

By implementing these measures, Chhotaudepur district can be better prepared to manage heatwaves and minimize their impact on public health

Landslides: Hilly areas in the district are prone to landslides during heavy rain

Hazard Mapping and Risk Assessment:

Identify landslide-prone areas within the district using geological surveys and historical data.

Create hazard maps to delineate risk zones and plan mitigation strategies.

Conduct vulnerability assessments of settlements and infrastructure located in high-risk zones.

Public Awareness and Capacity Building:

Educate communities in high-risk areas about landslide warning signs, evacuation procedures, and safety measures.

Organize training programs for local authorities and volunteers on search and rescue techniques, first aid, and disaster response protocols.

Conduct regular drills to familiarize residents with evacuation routes and emergency shelters.

Land Management Practices:

Implement regulations to restrict construction on steep slopes and unstable terrain.

Promote proper drainage systems and vegetation cover on hillsides to minimize soil erosion.

Encourage landslide mitigation measures like retaining walls or drainage channels in high-risk areas.

Warning and Monitoring:

Early Warning System:

Establish a system to monitor rainfall levels, slope stability, and other triggers for landslides.

Issue timely warnings through multiple channels like sirens, community loudspeakers, SMS, and social media.

Classify warnings based on severity (low, moderate, high) to guide appropriate evacuation measures.

Real-time Monitoring:

Install inclinometers, rain gauges, and other monitoring instruments in high-risk areas to detect early signs of slope movement.

Response: Evacuation Plans:

Develop clear evacuation plans for settlements located in high-risk zones.

Designate safe evacuation routes and assembly points outside landslide-prone areas.

Ensure accessibility for people with disabilities during evacuations.

Emergency Response Teams:

Establish well-equipped emergency response teams trained in search and rescue operations specific to landslides.

Ensure these teams have access to necessary equipment like heavy

machinery, communication tools, and medical supplies.

Recovery: Search and Rescue:

Conduct swift search and rescue operations to locate and evacuate people trapped under landslides.

Damage Assessment:

Assess the extent of damage to infrastructure, houses, and essential services.

Identify areas requiring immediate restoration and long-term reconstruction efforts.

Rehabilitation:

Provide financial and logistical support to affected families for temporary shelter, food, and clothing.

Implement rehabilitation programs to restore livelihoods and rebuild damaged infrastructure in a way that reduces future landslide risks.

Additional Considerations:

Inter-departmental Coordination: Ensure smooth collaboration between various departments like geology, disaster management, public works, and local administration during landslide events.

Resource Allocation: Allocate sufficient budget and resources for

landslide preparedness, response, and recovery activities.

Post-Landslide Assessment: Analyze the effectiveness of the response measures taken during a landslide event. Identify areas for improvement for future preparedness and mitigation strategies.

Man-made hazards

Risks: Loss of life and property:

Forest fires: Dry forests and human activities increase fire risks.

Prevention:

Public Awareness Campaigns:

Educate communities living near forests about fire safety measures.

Highlight the dangers of burning agricultural waste or starting campfires in forests.

Promote responsible use of forest resources.

Forest Management:

Create firebreaks (mineralized strips of land) around forests to contain fires.

Regularly clear dry leaves, twigs, and other debris from forest floors to reduce fuel load.

Implement controlled burns during safe periods to reduce flammable material buildup.

Surveillance and Monitoring:

Establish fire watch towers in strategic locations.

Utilize patrolling by forest guards and remote sensing technologies for early fire detection.

Preparedness: Communication

Network: Develop a robust communication network for rapid response during fire emergencies. This could include dedicated phone lines, wireless communication systems, and early warning systems for nearby communities.

Firefighting Equipment:

Equip forest departments and local fire brigades with sufficient firefighting equipment like fire trucks, hoses, and personal protective gear.

Consider establishing strategically placed water sources near forests.

Contingency Plans:

Develop clear contingency plans outlining actions for different fire scenarios. This should include evacuation procedures for communities at risk.

Regularly conduct fire drills with forest department personnel, firefighters, and potentially, volunteers from nearby communities.

Response: Rapid Mobilization:

Implement a swift response system to contain fires at the initial stages. This might involve deploying fire tenders, firefighters, and forest department personnel.

Firefighting Techniques:

Employ appropriate firefighting techniques based on the type and scale of the fire.

Consider using controlled backfires to create firebreaks and contain the main blaze.

Inter-agency Coordination:

Ensure smooth coordination between the forest department, fire department, local administration, police, and potentially the National Disaster Response Force (NDRF) if needed.

Recovery: Damage Assessment:

Assess the damage caused by the fire to forests, wildlife, and infrastructure.

Reforestation: Develop plans for reforestation in fire-affected areas to restore ecological balance.

Community Support: Provide support to communities affected by the fire, including livestock loss or damage to property.

Additional Considerations:**Volunteer Training:**

Consider training volunteers from local communities in basic firefighting techniques and fire safety measures. This can strengthen the response network.

Post-Fire Analysis:

Analyze the effectiveness of the response measures after each fire incident.

Identify areas for improvement and update the plan accordingly

Industrial accidents: Mining and other industrial activities pose potential threats. Prevention:

Industrial Siting and Zoning: Enforce proper land-use policies to ensure industries using hazardous materials are located away from residential areas.

Safety Regulations and Inspections: Strengthen safety regulations for industries and conduct regular inspections to identify and address potential hazards.

Emergency Preparedness Plans: Mandate all industries to have comprehensive emergency preparedness plans outlining procedures for various accident scenarios. These plans should include:

Hazard identification and risk assessment specific to the industry.

Clear protocols for incident reporting, evacuation, and containment.

Training for employees on emergency response procedures and use of safety equipment.

Public Awareness: Conduct awareness programs for communities residing near industrial areas. Inform them about potential hazards, safety measures, and evacuation plans in case of an accident.

Response:

Emergency Response Teams: Establish well-equipped and trained emergency response teams comprising firefighters, police, medical personnel, and industry experts.

Communication Protocol: Develop a clear communication protocol for reporting, coordinating, and disseminating information during an industrial accident. This should involve designated contact points within industries, district authorities, and emergency response teams.

Medical Response: Ensure adequate medical facilities and resources are available to handle casualties resulting from industrial accidents.

Media Management: Establish a designated spokesperson to provide timely and accurate information to the public during an industrial accident. This helps to minimize panic and avoid spreading misinformation.

Recovery: Site Assessment and Remediation: Conduct a thorough assessment of the accident site to identify the cause and prevent future occurrences. Implement necessary remediation measures to ensure environmental safety.

Compensation and Rehabilitation: Provide proper compensation to those affected by the accident, including medical expenses and livelihood support. Offer rehabilitation programs for injured workers.

Investigation and Accountability: Conduct a transparent investigation to determine the cause of the accident and hold those responsible accountable.

Review and Improvement: Review the emergency response plan and identify areas for improvement based on lessons learned from the incident.

Additional Considerations:

Inter-Agency Coordination: Ensure smooth collaboration between various agencies like the district administration, pollution control board, fire department, and industry

associations for effective response and recovery.

Mock Drills: Conduct regular mock drills to test the emergency response plan and identify areas for improvement.

Training for Medical Personnel: Provide specialized training for medical personnel on how to handle casualties from industrial accidents involving hazardous materials

Road accidents: Chhotaudepur's road network requires improvement for safety

Prevention: Road Safety Awareness Campaigns: Organize campaigns to educate people about traffic rules, safe driving practices, and responsible pedestrian behavior.

Target campaigns towards specific groups like young drivers, two-wheeler riders, and school children.

Utilize various channels like public service announcements, workshops, and school programs.

Road Infrastructure Improvements: Identify accident-prone areas and implement corrective measures like improved signage, better road markings, and proper lighting.

Address road design flaws that contribute to accidents, such as sharp turns or narrow lanes.

Prioritize maintenance of roads to fill potholes and repair damaged surfaces.

Vehicle Fitness and Licensing:

Enforce stricter vehicle fitness checks to ensure only road-worthy vehicles operate on Chhotaudepur roads.

Streamline the driver licensing process to ensure proper training and testing before licenses are issued.

Response:

Emergency Response System:

Establish a well-coordinated emergency response system involving police, ambulance services, fire department, and road transport authorities.

Ensure a quick and efficient response to accidents, minimizing delays in reaching victims.

Train first responders on proper accident scene management and medical aid techniques.

Trauma Care Facilities:

Improve the capacity and capabilities of hospitals within Chhotaudepur to handle trauma cases effectively.

Equip hospitals with necessary medical supplies and ensure well-trained medical personnel are available during emergencies.

Post-Accident Management:

Accident Investigation:

Conduct thorough investigations to determine the cause of accidents and identify potential areas for preventive measures.

Share accident data and analysis with relevant authorities for informed decision-making on road safety initiatives.

Victim Support:

Provide support services to victims and their families, including medical aid, legal assistance, and counseling.

Additional Considerations:

Public Participation: Encourage public participation in road safety initiatives. This could involve involving communities in awareness campaigns or reporting unsafe road conditions.

Data Analysis: Regularly analyze accident data to identify trends and patterns. This can help tailor preventive measures to address specific road safety challenges in Chhotaudepur.

Technology Integration: Explore the use of technology for road safety, such as automated speed enforcement systems and advanced traffic management systems.

- All hazards pose risks to lives and livelihoods, with vulnerable populations facing greater impacts.

Disruption of essential services:

Infrastructure damage from hazards can disrupt electricity, water supply, and healthcare.

Food insecurity: Droughts and floods can affect agricultural production and food security.

Spread of diseases: Floods and unsanitary conditions can lead to waterborne diseases.

Psychological impacts: Disasters can cause anxiety, depression, and other mental health issues.

Vulnerabilities: Socioeconomic :-

Factors Contributing to Vulnerability:

Low Income and Livelihood Dependence: Chhotaudepur might have a significant population below the poverty line. Livelihoods heavily reliant on agriculture or casual labor can be particularly vulnerable to disasters. Disruptions caused by disasters like floods, droughts, or storms can lead to job losses, income insecurity, and food shortages.

Limited Infrastructure: Poor quality housing, inadequate sanitation facilities, and lack of proper road networks can worsen the impact of disasters. Weak infrastructure can make it difficult to evacuate

residents, deliver aid, and rebuild after a disaster.

Limited Access to Basic Services:

Insufficient access to healthcare, education, and social safety nets can exacerbate the effects of disasters. Vulnerable populations might struggle to access medical care, replace damaged educational materials, or find alternative housing after a disaster.

Social Marginalization: Certain communities, such as those based on caste, religion, or gender, might face additional challenges. They might have limited access to resources, decision-making power, or social safety nets, making them more vulnerable during disasters.

Potential Examples of Socioeconomic Impacts: Loss of crops and livestock: Disasters like floods, droughts, or hailstorms can devastate agricultural production, leading to food insecurity and income loss for farmers.

Damage to homes and infrastructure: Floods, earthquakes, or cyclones can damage or destroy homes, displacing residents and causing economic losses.

Disruption of livelihoods: Disasters can disrupt businesses, markets, and transportation networks, leading to unemployment and income loss.

Increased healthcare needs: Disasters can lead to injuries, outbreaks of waterborne diseases, and mental health issues, putting pressure on healthcare systems.

Loss of education opportunities: Damage to schools or displacement due to disasters can disrupt education for children.

- Geographical
- Environmental Deforestation, soil erosion, and depleted water resources exacerbate risks
- Institutional

Key findings:

Chhotaudepur faces a variety of natural and man-made hazards with potential for significant impacts.

Vulnerable populations, including tribal communities, are at greater risk due to socio-economic factors.

Addressing vulnerabilities through preparedness, mitigation measures, and capacity building is crucial for reducing disaster risks.

Chapter 3: Institutional Arrangements for Disaster Management.

This section would describe the organizational structure that exists at the Chhotaudepur District, Block, Gram Panchayat, Municipality and community levels for disaster management. It would include information about composition of the above institutions and their functions as per the National Disaster Management Act, 2005 and in the National Disaster Management Policy. However, DDMA may also identify functions of other institutions which they consider important such as Disaster Management Teams, Crisis Management Group/Incident Command System, Emergency Operation Centers (EOCs) and their operation, Site Operation Centres, Platforms such as inter-agency groups that would facilitate partnerships with NGOs, private sector, Community based Organisations (CBOs), other institutions (academic) and elected representatives. Major industrial /service / infrastructure establishments and fair capability plans should be listed (detailed in annexure)

D.M. organizational structure at the national level,

India follows a multi-tier approach to disaster management, with a well-

defined structure at the national level. Here's a breakdown of the key players:

National Disaster Management Authority (NDMA) :

Apex body for disaster management in India, established under the Disaster Management Act, 2005.

Headed by the Prime Minister of India.

Responsible for laying down policies, plans, and guidelines for disaster preparedness, response, and mitigation at the national level.

Oversees the National Disaster Response Force (NDRF).

Coordinates with various ministries, state governments, and NGOs for disaster management activities.

National Institute of Disaster Management (NIDM):

Premier institute for capacity building, research, training, and education in disaster management.

Functions under the Ministry of Home Affairs (MHA).

Conducts training programs for various stakeholders involved in disaster management, including

government officials, NGOs, and local communities.

Develops resource materials and training modules on disaster preparedness, mitigation, and response.

National Executive Committee (NEC):

High-level committee headed by the Home Minister of India.

Provides policy direction and approves the National Disaster Management Plan (NDMP).

Oversees the functioning of the NDMA and NIDM.

State and District Levels:

Each state in India has its own State Disaster Management Authority (SDMA) that mirrors the structure of the NDMA at the state level.

SDMAs work under the guidance of the NDMA and are responsible for disaster management within their respective states.

Similarly, districts have District Disaster Management Authorities (DDMAs) that prepare District Disaster Management Plans (DDMPs) specific to their vulnerabilities and hazards.

Other Important Players:

Ministry of Home Affairs (MHA):

The nodal ministry for disaster management in India, overseeing the NDMA, NIDM, and coordinating disaster response efforts.

Central Ministries and Departments:

Various ministries and departments play a crucial role based on their expertise. For example, the Ministry of Health & Family Welfare manages public health aspects during disasters.

National Disaster Response Force (NDRF):

A specialized force under the NDMA, responsible for undertaking rescue and relief operations during major disasters.

Indian Armed Forces: Play a vital role in disaster response operations, providing manpower, logistics, and rescue expertise.

Non-Governmental Organizations (NGOs):

Partner with the government in disaster preparedness, response, and recovery efforts.

Overall, India's D.M. structure emphasizes coordinated efforts across various levels of government, specialized institutions, and non-government organizations to effectively manage disasters and minimize their impact.

D.M. organizational structure at the state level including Incident Response

D.M. Organizational Structure at the State Level in India (including Incident Response)

India's disaster management (DM) structure follows a tiered approach, with a well-defined organization at the state level mirroring the national

setup. Here's a breakdown of the key players and their roles in incident response:

State Disaster Management Authority (SDMA):

The apex body for disaster management within the state. Headed by the Chief Minister or a designated minister.

Responsible for:

Laying down policies, plans, and guidelines for disaster preparedness, response, and mitigation at the state level.

Overseeing the State Disaster Response Force (SDRF), if established.

Coordinating with various state departments, district authorities, and NGOs for disaster management activities.

Approving the State Disaster Management Plan (SDMP) which outlines the overall response strategy.

State Executive Committee (SEC):

- A high-level committee headed by the Chief Secretary of the state.
- Provides policy direction and approves the SDMP.
- Oversees the functioning of the SDMA.

Incident Response System (IRS):

A critical framework for managing emergencies and disasters at the state and district levels.

Functions through Incident Response Teams (IRTs) at various levels (state, district, sub-division, block).

Key components:

Responsible Officer (RO):

Designated official at the state and district level who is overall in charge of incident response. May delegate responsibilities to the Incident Commander (IC).

Incident Commander (IC): Leads and manages the incident response through IRTs.

Command Staff and General Staff:

Assist the IC in managing the incident effectively.

State Disaster Response Force (SDRF) (if established):

- A specialized force trained for rapid response during disasters.
- Under the command of the SDMA.
- Conducts search and rescue operations, provides relief materials, and assists in damage assessment.

Other Important Players:

- **State Departments:** Departments like Health, Fire, Police, Public Works, and Education play crucial roles during emergencies based on their expertise.
- **District Disaster Management Authority (DDMA):** Each district has a DDMA that prepares a District Disaster Management Plan (DDMP) specific to their vulnerabilities

and hazards. The DDMA activates local IRTs during emergencies and reports to the SDMA.

- **Non-Governmental Organizations (NGOs):** Partner with the government in disaster preparedness, response, and recovery efforts.

Incident Response Process:

1. **Early Warning and Monitoring:** State agencies monitor weather forecasts and other potential hazards.
2. **Activation of IRTs:** Based on the severity of the threat, the SDMA or DDMA activates the IRTs at the appropriate level.
3. **Incident Response:** IRTs coordinate response efforts, including evacuation, search and rescue, and distribution of relief materials.
4. **Recovery and Reconstruction:** The SDMA, in collaboration with other departments and NGOs, facilitates recovery and reconstruction efforts in the affected areas.

Communication and Coordination:

- Effective communication is critical during emergencies. The SDMA plays a central role in coordinating information flow between state departments, district

authorities, and response agencies.

- Regular updates and advisories are disseminated to the public through various channels like media, SMS, and social media.

Overall, the state-level DM structure ensures a coordinated response to disasters through the SDMA, IRS, and various departments. The focus is on timely response, effective resource management, and minimizing the impact of disasters on the population.

- System (IRS) in the State

Incident Response System (IRS) in Gujarat

Gujarat, like other Indian states, adopts the Incident Response System (IRS) as the framework for managing emergencies and disasters. Here's a breakdown of how IRS functions within the Gujarat state structure:

State Level:

Gujarat State Disaster Management Authority (GSDMA):

The apex body for disaster management in Gujarat, headed by the Chief Minister.

Oversees the implementation of IRS across the state.

Provides guidelines and training for Incident Response Teams (IRTs) at various levels.

Approves the State Disaster Management Plan (SDMP) which

outlines the IRS activation process and response strategies.

State Executive Committee (SEC): Headed by the Chief Secretary, this committee provides policy direction and approves the SDMP.

Incident Response Teams (IRTs):

Pre-designated teams established at the state, district, sub-division, and block levels.

Activated by the Responsible Officer (RO) at the respective level based on the severity of an incident.

IRS Officials:

Responsible Officer (RO): A designated official at the state and district level who is overall in charge of incident response. May delegate responsibilities to the Incident Commander (IC).

Incident Commander (IC): Leads and manages the incident response through IRTs. Oversees activities like search and rescue, evacuation, and resource allocation.

Command Staff and General Staff: Assist the IC in managing the incident effectively.

Gujarat State Disaster Response Force (SDRF) (if established):

A specialized force trained for rapid response during disasters, functioning under the GSDMA's command.

Conducts search and rescue operations, provides relief materials, and assists in damage assessment.

Response Process:

Early Warning and Monitoring: Gujarat state agencies monitor weather forecasts, potential hazards, and potential incidents requiring response.

IRT Activation: Based on the threat level, the GSDMA or the District Disaster Management Authority (DDMA) activates the IRTs at the appropriate level.

Incident Response: Activated IRTs coordinate response efforts as per the SDMP and IRS guidelines. This might involve evacuation, search and rescue, damage assessment, and distribution of relief materials.

Recovery and Reconstruction: The GSDMA, in collaboration with other departments and NGOs, facilitates recovery and reconstruction efforts in the affected areas.

Communication and Coordination:

Effective communication is crucial. The GSDMA plays a central role in coordinating information flow between state departments, district authorities, and response agencies. Regular updates and public advisories are disseminated through media, SMS, and social media.

Key Points:

- The IRS in Gujarat emphasizes a structured and coordinated approach to incident response.
- Pre-designated teams and clear roles for officials ensure a swift and effective response.

- Communication and collaboration are crucial elements for successful incident management.
- D.M. organizational structure at the district level

D.M. Organizational Structure at the District Level (Chhotaudepur)

India's disaster management (DM) structure follows a tiered approach, with a well-defined organization at the district level mirroring the state setup. Here's a breakdown of the key players and their roles in Chhotaudepur district:

District Disaster Management Authority (DDMA):

The primary body for disaster management within Chhotaudepur district.

Likely headed by the District Collector (or another designated official).

Responsible for:

Preparing the District Disaster Management Plan (DDMP) specific to Chhotaudepur's vulnerabilities and hazards.

Overseeing disaster preparedness activities like awareness campaigns, mock drills, and resource stockpiling.

Coordinating with local departments, NGOs, and communities during emergencies.

Activating the Incident Response Team (IRT) at the district level during incidents.

District Executive Committee (DEC)

A committee headed by a senior official (possibly Additional District Magistrate) to provide guidance and support to the DDMA.

Incident Response Team (IRT):

A team of officials from various departments like police, fire, health, and public works, pre-designated to respond to emergencies.

Activated by the District Disaster Management Authority (DDMA) based on the severity of the incident. Led by an Incident Commander (IC) who manages the response on the ground.

Other Important Players:

Sub-Divisional and Block Levels:

Chhotaudepur might have IRTs at sub-divisional and block levels to coordinate response efforts in smaller areas. These report to the district IRT.

Local Departments: Departments like health, fire, police, and public works play crucial roles during emergencies based on their expertise. They are also likely to be represented in the IRT.

Non-Governmental Organizations (NGOs): Partner with the government in disaster preparedness, response, and recovery efforts.

Community Volunteers: Trained volunteers from communities can be a valuable resource for the DDMA and IRT during emergencies.

Communication and Coordination:

The DDMA plays a central role in coordinating information flow between the district administration, local departments, and communities. During emergencies, advisories and updates are disseminated through local media, community leaders, and potentially mobile apps (if available).

Resources:

The Chhotaudepur district government website might have a page dedicated to the DDMA or disaster management. Here, you could potentially find information about the DDMA's structure, roles, and contact details.

Overall, the DM structure at the district level (Chhotaudepur) ensures a localized response to emergencies. The DDMA, IRT, and local departments work together to manage incidents effectively, leveraging support from NGOs and communities.

- District Crisis Management Group(CMG)

The District Crisis Management Group (CMG) is likely a sub-committee of the District Disaster Management Authority (DDMA) in Chhotaudepur district, India. While the specific structure might vary slightly depending on state guidelines, here's a possible breakdown of the CMG and its role:

Purpose:

The CMG's primary function is to assess and manage crisis situations that arise within the district.

These situations might be different from disasters in that they may not be natural hazards but could still disrupt normal life and require a coordinated response.

Examples could include:

Industrial accidents

Public health emergencies (disease outbreaks)

Large-scale civil unrest

Composition:

The CMG would likely consist of senior officials from various departments relevant to the specific crisis. Here are some potential members:

District Collector (or Chairperson of the DDMA) - acts as the head of the CMG.

- Police Superintendent
- Fire Chief
- Medical Officer
- Public Works Department Representative
- Additional members from relevant departments depending on the crisis (e.g., Environment department for an industrial accident)

Roles and Responsibilities:

- **Crisis Assessment:** The CMG would gather information, assess the evolving situation, and determine the level of threat posed by the crisis.

- **Decision Making:** Based on the assessment, the CMG would develop response strategies and make crucial decisions to manage the crisis effectively.
- **Coordination:** The CMG acts as a central coordinating body, ensuring smooth collaboration between different departments involved in the response. This might involve resource allocation, communication protocols, and deployment of personnel.
- **Communication:** The CMG plays a role in disseminating information to the public through official channels during the crisis.

Relationship to DDMA:

- The CMG likely operates under the guidance of the DDMA.
- The DDMA would be responsible for disaster preparedness, including planning for potential crises.
- In the event of a crisis, the DDMA would activate the CMG to handle the specific situation.

Overall, the District Crisis Management Group serves as a vital body for managing unforeseen critical situations in Chhotaudepur district. By bringing together relevant stakeholders and facilitating coordinated action, the CMG helps mitigate the impact of crises and ensure public safety

District Disaster Management Committee and Task Forces.

The District Disaster Management Committee (DDMC) and Task Forces are crucial components of India's disaster management structure at the district level. Here's a breakdown of their roles and how they work together:

District Disaster Management Committee (DDMC):

Function: The DDMC is the apex body for disaster management within a district, like Chhotaudepur.

Leadership: Headed by a senior official, typically the District Collector (or another designated official).

Responsibilities:

Develops the District Disaster Management Plan (DDMP) specific to the district's vulnerabilities and hazards.

Oversees disaster preparedness activities like:

Community awareness campaigns on disaster risks and safety measures.

Organizing mock drills to practice response procedures.

Stockpiling essential supplies like food, water, and medicines.

Coordinates disaster response efforts during emergencies.

Activates and supervises various Task Forces constituted for specific hazards.

Liaises with state and local authorities for resource mobilization and support.

Task Forces:

Function: Specialized teams established by the DDMC to handle specific types of disasters or aspects of disaster response.

Composition: Each Task Force consists of members from various departments with expertise relevant to their assigned role. For example, a Flood Task Force might include representatives from:

- Irrigation Department
- Public Works Department
- Fire Department
- Medical Department
- NGOs with experience in flood relief

Types of Task Forces: The specific Task Forces formed by a DDMC will vary depending on the district's risk profile. Here are some common examples:

Flood Task Force

Earthquake Task Force

Drought Task Force

Heatwave Task Force

Medical Relief Task Force

Evacuation and Sheltering Task Force

Damage Assessment Task Force

Working Together:

- The DDMC provides overall guidance and direction to the Task Forces.
- Each Task Force has a pre-defined plan outlining their specific roles and responsibilities during a disaster they are equipped to handle.

- During an emergency, the DDMC activates the relevant Task Force(s) based on the nature of the disaster.
- The Task Forces then work collaboratively to execute their assigned tasks within the broader framework of the DDMP.

Importance:

The DDMC-Task Force structure ensures a well-coordinated and efficient response to disasters at the district level.

By having specialized teams with relevant expertise, the response can be tailored to the specific needs of each disaster.

Effective planning by the DDMC and proactive work by the Task Forces during preparedness activities can significantly improve a district's ability to manage disasters and minimize their impact.

Resources:

The Chhotadepur district government website might have a page dedicated to the DDMC or disaster management. Here, you could potentially find information about the DDMC's structure, roles, and contact details of the Task Forces

Incident Response System in the District.

EOC setup and facilities available in the district, Public and private emergency service facilities available in the district

Here's a roadmap to identify public and private emergency service facilities available in Chhotaudepur district:

Public Emergency Services:

Government Hospitals:

Start by searching for the Chhotaudepur district health department website or portal. It might list government hospitals within the district, including contact details and specialties.

In the absence of a district website, look for the Gujarat state health department website. They might have a directory of government hospitals by district.

Police Stations:

The Chhotaudepur district police website might have a page listing police stations within the district.

Alternatively, a Gujarat state police website might have a directory of police stations by district.

Fire Stations:

Similar to hospitals, look for the Chhotaudepur district fire department website or search the Gujarat state fire department website for a list of fire stations in the district.

Private Emergency Services:

- **Hospitals and Clinics:**

Search online directories like Justdial or Practo for private hospitals and clinics in Chhotaudepur. These platforms allow filtering by specialization (e.g., cardiology, orthopedics).

Look for websites or social media pages of private hospitals in

Chhotaudepur, which might list their emergency services.

- **Ambulance Services:**

Online directories can help find private ambulance services operating in Chhotaudepur.

Some private hospitals might have their own ambulance services. Check their websites or contact them directly for details.

Additional Resources:

- **District Disaster Management Plan (DDMP):** While the full DDMP might not be publicly available, it might have a section listing emergency service facilities within the district. Try locating the DDMP on the Chhotaudepur district government website.
- **Local Information:** Talk to local residents or community leaders who might have knowledge about private emergency service providers in the area.

Remember:

- Public emergency services like government hospitals and fire stations typically operate 24/7.
- Private facilities might have varying operation hours. It's crucial to confirm timings before relying on them during emergencies.
- Always keep emergency contact numbers readily available, including the national ambulance helpline (102) and police helpline (100).

By using these resources, you can build a comprehensive picture of the public and private emergency service facilities available in Chhotaudepur district. This information can be helpful during emergencies or for planning purposes.

- Forecasting and warning agencies

India Meteorological Department (IMD):

The primary national agency for weather forecasting and warnings in India.

Plays a crucial role in Gujarat by providing:

- Weather forecasts at various time scales (short, medium, long-range)
- Cyclone warnings and storm surge advisories
- Early warnings for heavy rainfall, heatwaves, and other severe weather events
- Operates a network of meteorological observatories across Gujarat, including one with upper-air observations in Ahmedabad.
- Issues weather warnings through various channels like:
 - Public weather bulletins
 - Warnings disseminated to state and district authorities
 - Mobile phone apps like IMD Weather and Mausam
 - Social media platforms

Gujarat State Disaster Management Authority (GSDMA):

- While not a forecasting agency itself, the GSDMA plays a vital role in disseminating weather warnings and advisories received from IMD.
- Coordinates with district authorities to ensure warnings reach communities effectively.
- May issue additional advisories based on the specific threats posed by the weather event.

Other Potential Sources:

- **National Remote Sensing Centre (NRSC):** While the primary focus is earth observation, NRSC might provide satellite-derived data or imagery helpful for weather monitoring.
- **Indian Institute of Tropical Meteorology (IITM):** A premier research institute that might issue outlooks or seasonal forecasts relevant to Gujarat.
- **Private weather companies:** Some private companies offer
 - weather forecasting services, but it's crucial to rely on official sources like IMD for critical weather warnings.

Here are some resources to find the latest forecasts and warnings for Gujarat:

- **IMD Gujarat website:**
<https://mausam.imd.gov.in/ahmedabad/>
- **GSDMA website:**
<http://www.gsdma.org/>
- **IMD mobile apps:** IMD Weather or Mausam

Remember:

- It's crucial to rely on official sources like IMD for critical weather warnings.
- Stay informed about the latest forecasts and warnings, especially during the monsoon season or when severe weather events are predicted.
- Take necessary precautions based on the weather advisories issued by the **authorities**

Chapter 4: Prevention and Mitigation Measures

Prevention measures

Special projects proposed for preventing the disasters
GIO tagging of Dam and villages near by riverbank, causeways, and rail underpass etc. . . .

Mitigation Measures- This section would describe the strategies and interventions that the District Disaster Management Authority (DDMA) and other stakeholders will implement in order to reduce disaster risks. This may include both structural and non-structural kind of strategies. There should be strategy for Information, Education and Communication (IEC) activities under the Non structural measures.

Hazard-wise Structural mitigation measures for natural as well as manmade disasters

Mitigation measures for natural and man-made disasters in Chhotaudepuur district would need to be tailored to the specific hazards prevalent in the region. Here are some hazard-wise structural mitigation measures:

Floods: Construction of floodwalls and levees along rivers and streams prone to flooding. Implementing stormwater management systems to reduce runoff and flood risk. Elevating critical infrastructure and

buildings in flood-prone areas to reduce damage.

Earthquakes: Enforcing strict building codes to ensure structures are earthquake-resistant. Retrofitting older buildings to improve their seismic resilience. Designing infrastructure with flexible materials and base isolators to absorb seismic waves.

Landslides: Implementing slope stabilization measures such as retaining walls, terracing, and rock bolts. Installing drainage systems to reduce water saturation in soil, a common trigger for landslides. Conducting thorough geotechnical assessments before development to identify high-risk areas.

Cyclones and Storms:

Constructing cyclone-resistant buildings with reinforced roofs and walls. Installing storm shutters or impact-resistant windows to protect against high winds and flying debris. Creating storm surge barriers and mangrove buffer zones along coastlines to mitigate coastal erosion and flooding.

Forest Fires:

Establishing firebreaks and controlled burn zones to limit the spread of wildfires. Implementing community-based fire management practices such as early warning systems and firefighting training. Using fire-resistant building materials and landscaping techniques in vulnerable areas.

Industrial Accidents:

Implementing strict safety regulations for industries handling hazardous materials. Establishing emergency response plans and training programs for local emergency services. Zoning industrial areas away from residential and sensitive environmental areas.

Transportation Accidents:

Improving road infrastructure with measures such as guardrails, rumble strips, and signage to enhance safety. Implementing traffic management systems to reduce the risk of accidents at intersections and high-traffic areas. Conducting regular maintenance and inspections of bridges and tunnels to ensure structural integrity.

Droughts: Implementing water conservation measures such as rainwater harvesting and efficient irrigation techniques. Promoting drought-resistant crops and agricultural practices to mitigate the impact on food security. Establishing early warning systems and drought monitoring programs to support proactive response measures. Each of these measures would require coordination among local government agencies, community organizations, and relevant stakeholders to ensure effective implementation and long-term sustainability. Additionally, public awareness and education campaigns would play a crucial role in fostering a culture of disaster preparedness and resilience within the Chhotaudepuur district.

Chapter 5: Preparedness Measures

Certainly, enhancing preparedness measures is crucial for effective disaster response. Here's a comprehensive breakdown of preparedness measures for Chhotaudepuur district:

Communication Systems:

Establishing a robust network of communication systems including radio, mobile phones, and internet to ensure timely dissemination of warnings and information.

Ensuring redundancy and interoperability among communication systems to mitigate potential failures during disasters.

Public Distribution Systems and Storage Facilities:

Maintaining adequate stockpiles of essential resources including food, medicines, and water in strategically located storage facilities.

Implementing inventory management systems to track and manage supplies efficiently.

Developing protocols for rapid distribution of relief supplies to affected areas.

Transportation Facilities:

Identifying and securing transportation assets such as vehicles and helicopters for rapid deployment of response teams and supplies.

Establishing contingency plans for managing transportation disruptions during disasters.

Medical Facilities:

Ensuring medical facilities are equipped and staffed to provide emergency medical care during disasters.

Preparing medical teams for rapid deployment to affected areas and establishing temporary medical facilities as needed.

Emergency Reserves:

Maintaining emergency reserves of essential resources such as food, water, and medicines to sustain affected populations until additional support arrives.

Establishing protocols for requesting and coordinating assistance from national and international agencies.

Fire Stations and Cyclone Shelters:

Identifying and preparing fire stations and cyclone shelters as emergency evacuation centers.

Conducting regular maintenance and capacity assessments of these facilities to ensure readiness.

NGOs and Volunteers:

Identifying and mobilizing NGOs, community groups, and volunteers for disaster response activities.

Establishing coordination mechanisms to integrate volunteer efforts into the overall response effort.

Incident Response Teams:

Forming specialized teams for early warning, search and rescue, evacuation, and damage assessment.

Providing training and resources to these teams to enhance their effectiveness in responding to disasters.

Coordination with External Agencies:

Establishing protocols for requesting assistance from governmental

agencies, military forces, and other stakeholders.

Conducting regular exercises and drills to test coordination mechanisms and improve response capabilities.

Logistics and Procurement:

Developing protocols for procuring and deploying necessary equipment and supplies.

Establishing contracts and agreements with vendors for expedited procurement during emergencies.

Community Preparedness and Awareness:

Implementing community-based preparedness initiatives including awareness campaigns, training programs, and mock drills.

Empowering communities to take proactive measures to mitigate risks and respond effectively to disasters.

Standard Operating Procedures (SOPs) and Protocols:

Developing SOPs for various aspects of disaster response including warning systems, evacuation

procedures, and resource management.

Regularly reviewing and updating SOPs based on lessons learned from past events.

Media Management and Information Dissemination:

Establishing protocols for communicating with the media and disseminating accurate information to the public.

Conducting training sessions for media personnel to ensure responsible reporting during disasters.

Documentation and Knowledge Management:

Documenting lessons learned and best practices from previous disasters.

Uploading information on resources and capabilities to national and state disaster resource networks.

Awareness Generation and Resource Mobilization:

Developing strategies to raise awareness about disaster risks and preparedness measures among the public and stakeholders.

Mobilizing resources from government, private sector, and civil society to support preparedness efforts.

Establishment of Disaster Management Committees:

Establishing disaster management committees at various levels to coordinate preparedness and response activities.

Providing guidance and support to sub-district level committees to enhance local preparedness efforts.

By implementing these preparedness measures, Chhotaudepuur district can strengthen its resilience and capacity to respond effectively to disasters, minimizing loss of life and property

Chapter 6: Capacity Building and Training Measures

Approach Capacity Building Plan

Executed Events of training and Capacity building in 2023

SR NO.	Subjects	Chhotaudepur	
		T	A
1. Orientation Program			
1	Orientation programme for District Disaster Management Committee	2	2
2	Orientation programme for Govt officials	2	2
3	Police Department	1	2
4	Fire Department,	1	1
5	Education Department	1	1
6	R&B Department	1	1
7	Orientaion program for specially abled persons	2	2
8	Panchayati Raj Institution	2	2
9	NGOs,(Non Government Organisation,) CBOs, Civil Society Organisations,youth organisation	1	5
10	Orientation / Sensitisation of Volunteers such as Aapda Mitra, NCC, NSS, NYKS, HGs, GRDs,LRDs,Civil defence etc...in disaster management	5	5
11	Municipality	1	1

12	Narmada Water & Sanitation	1	1
13	EOC management training for officers/ staff	2	2
14	Updation/preparation of DDMP	1	1
15	Promote women's leadership/Womens group	2	2
16	Empower both local authorities and communities to reduce and manage disaster risk	2	2
17	Role and responsibility of various departments (SOP) for all disasters	2	2
18	Socially inclusive gender sensitive & empowering in DRM	2	2
19	Build and strength the resilience of poor community to prevent disasters.	2	2
20	Search and Rescue Training	3	3
21	First aid and health training	3	3
22	Fire and safety Training	3	3
23	HAM/Sattelite phone/VHF training	2	2
24	Masons/ Engineers training	1	1
25	Early Warning & Communication training for village level response group members (including 175 cyclone prone villages)	2	2

2. School Safety			
26	Training of Master Trainer(Virtual)	5	0
27	Mockdrill	1	0
28	Demonstration	1	0
29	Orientation on Disaster Management	3	0
3. Mock Exercise			
30	Flood & Cyclon for coastal districs	1	1
31	Flash Flood (Due to Heavy Rain, cloud burst, dam failure	1	1
32	Heat wave & Fire	2	2
33	Chemical (For insustrial units)	2	2
34	Epidemics (Hospital Specific)all Districts civil Hospitals	1	1
35	Educational Institution(Evacuation Drill)	1	1
36	Hospital Mock drill(Possible Hazard)	3	3
4. Action Plan			
37	Action Plan for Earthquake	1	1
38	Action Plan for Heatwave	1	1

39	Action plan for Cyclone	1	1
40	Action Plan for fire	1	1
41	Action plan flood and flash flood	1	1
42	Action plan lightining and thunderstorm	1	1
43	Action plan for mass gathering Events	1	1
44	Action plan for drought	1	1
45	Action plan for CBDRN	1	1
46	Action plan for Epidemics	1	1
Total			
5. Taluka Level Activities			
47	Orientation Program in Disaster management for TDMC	3	6
48	Orientation Program in Disaster management for Govt. officials & Local Functionary	2	6
49	Orientation Program of all Govt.officials on implementation of TDMP	1	1
50	Orientation Program for PRI members in Disaster Management	1	1
51	Updation of Taluka DM plan(Actual)	6	6
52	Training of teachers including School DM Plan	3	3
53	Orintation program for students in DM for collages/Universities	3	3

54	Hazard specific Mock drills	3	3
55	Awareness generation program	3	6
6. Village Level Activities			
56	Orientation Program in Disaster management for VDMC	40	40
57	Updation of VDMP(Actual)	894	894
58	Hazard specific Mock drills	5	5
7. ULB Level Activities			
59	Orientation Program in Disaster management for City Disaster Management Committee (CDMC)	2	2
60	Orientation Program of all Govt.officials on implimentation of City Disaster Management Plan (CDMP)	1	1
61	Orientation/Sensatization of councilors in Disaster Management	1	1
62	Updation of CDMP(Actual)	1	1
63	Hazard specific Mock drills	3	4
64	Mass awareness generation program	3	3

Targated Events of training and Capacity building in 20224-25

SR NO.		Chhotaudepur	
		T	A
1. Orientation Program			
1	Orientation programme for District Disaster Management Committee	2	
2	Orientation programme for Govt officials	2	
3	Police Department	1	
4	Fire Department,	1	
5	Education Department	1	
6	R&B Department	1	
7	Orientaion program for specially abled persons	2	
8	Panchayati Raj Institution	2	
9	NGOs,(Non Government Organisation,) CBOs, Civil Society Organisations,youth organisation	1	
10	Orientation / Sensitisation of Volunteers such as Aapda Mitra, NCC, NSS, NYKS, HGs, GRDs,LRDs,Civil defence etc...in disaster management	5	
11	Municipality	1	
12	Narmada Water & Sanitaion	1	
13	EOC management training for officers/ staff	2	
14	Updation/preparation of DDMP	1	
15	Promote women's leadership/Womens group	2	
16	Empowar both local authorities and communties to reduce and manage disaster risk	2	
17	Role and responsibility of various departments (SOP) for all disasters	2	
18	Socially inclusive gender sensitive & empowering in DRM	2	
19	Build and strength the resilience of poor community to prevent disasters.	2	
	Total	33	
	%	0	
20	Search and Rescue Training	3	

21	First aid and health training	3	
22	Fire and safety Training	3	
23	HAM/Sattelite phone/VHF training	2	
24	Masons/ Engineers training	1	
25	Early Warning & Communication training for village level response group members (including 175 cyclone prone villages)	2	
	Total	14	
	%	0	
2. School Safety			
26	Training of Master Trainer(Virtual)	5	
27	Mockdrill	1	
28	Demonstration	1	
29	Orientation on Disaster Management	3	
	Total	10	
	%	0	
3. Mock Exercise			
30	Flood & Cyclon for coastal districs	1	
31	Flash Flood (Due to Heavy Rain, cloud burst, dam failure	1	
32	Heat wave & Fire	2	
33	Chemical (For insustrial units)	2	
34	Epidemics (Hospital Specific)all Districts civil Hospitals	1	
35	Educational Institution(Evacuation Drill)	1	
36	Hospital Mock drill(Possible Hazard)	3	
	Total	11	
	%	0	
4. Action Plan			
37	Action Plan for Earthquake	1	
38	Action Plan for Heatwave	1	
39	Action plan for Cyclone	1	
40	Action Plan for fire	1	
41	Action plan flood and flash flood	1	
42	Action plan lightning and thunderstorm	1	

43	Action plan for mass gathering Events	1	
44	Action plan for drought	1	
45	Action plan for CBNDRN	1	
46	Action plan for Epidemics	1	
	Total	10	
	%	0	
	5. Taluka Level Activities		
47	Orientation Program in Disaster management for TDMC	3	
48	Orientation Program in Disaster management for Govt. officials & Local Functionary	2	
49	Orientation Program of all Govt.officials on implementation of TDMP	1	
50	Orientation Program for PRI members in Disaster Management	1	
51	Updation of Taluka DM plan(Actual)	6	
52	Training of teachers including School DM Plan	3	
53	Orientation program for students in DM for colleges/Universities	3	
54	Hazard specific Mock drills	3	
55	Awareness generation program	3	
	Total	25	
	%	0	
	6. Village Level Activities		
56	Orientation Program in Disaster management for VDMC	40	
57	Updation of VDMP(Actual)	894	
58	Hazard specific Mock drills	5	
	Total	939	
	%	0	
	7. ULB Level Activities		
59	Orientation Program in Disaster management for City Disaster Management Committee (CDMC)	2	
60	Orientation Program of all Govt.officials on implementation of City Disaster Management Plan (CDMP)	1	

61	Orientation/Sensatization of councilors in Disaster Management	1	
62	Updation of CDMP(Actual)	1	
63	Hazard specific Mock drills	3	
64	Mass awareness generation program	3	
	Total	11	
	%	0	

School Disaster Management Training and School Safety-2023-24

First Aid Training/orientation	Fire Demo/Drill	NDRF Demo/Drill	SDRF Demo/Drill	Disaster Awareness Program (Rally/Competition)	108 EMRI Demo.	Any Other (Pl.Specify)	No.of participants in all events
1	1	1	0	1	2	Video Demo presented in most of all schools	1000+
	2	0	0	2	2	Video Demo presented in most of all schools	1300+
1	1	1	0	5	1	Video Demo presented in most of all schools	1500+
2	1	1	0	1	2	Video Demo presented in most of all schools	1100+
1	1	1	0	1	1	Video Demo presented in most of all schools	1200+
1	1	1	0	6	1	Video Demo presented in most of all schools	2000+

Chapter 7: Response and Relief measures

Response planning (multi-hazard), preparedness and assessment

Quick assessment of damages and need Response flow chart Warning and alert :

Early Warning Systems: Two way communication system between village and district

Warning dissemination: Arrangements for dissemination to the last person DDMA to translate the alert warning to simple language and disseminate the same through various media. Withdrawal of warning should also be done by DDMA

Taskforce – Coordination and Planning:- Early Warning, Evacuation and Communication, Resettlement

Coordinate operations Head of Task Force: Collector

order	Time sheet	task	section	activity
1	normal time	Its at the state level connection and Installation of incident control	D.D.M.C., Panchayat Revenue Department	Establish disaster management communication at village level. Develop disaster management plan at all levels including district level. Holding a meeting with the Crisis Management Committee (Collector). (Department of Industry, Health and Welfare)
2		Communication systems and procedures	Police	Keeping the work forces at all levels free
3			Information Section	Information dissemination

4			D.D.M.C T.D.M.C V.D.M.C	To create public awareness about potential hazards, preparedness and precautionary measures
5			police, Municipality, R&B	To prepare manpower, conduct trainings, repair and maintain equipment and machinery
6			T.D.M.C SDM	Meeting and planning with various stakeholders on search rescue and early warning, evacuation and communication.
7	72 to 48 hours (3 days before the disaster)	Plan	Revenue Panchayat and Police	Verifying the alert received and initiating rehabilitation activities.
8				To verify the communication and warning system functioning at village panchayat and district level
9				Dispatch evacuation team to the scene with necessary machinery and equipment.
10				Arranging vehicles for both team and community.
11				Selecting safe rescue shelters and sites for the affected community and animals.
12				Informing the District and State Emergency Operation Center about the local situation.

13				Early warning in local language to the last destination to prepare warning message system
14				Conveying, orally by phone, television, radio, using media of news paper. Using non-electrical systems (retransmitting warnings frequently after some time lapse).
15				Ensure telephone contact list and work force SOP are updated or not.
16				Coordinating with other task forces (search and rescue, public health, law and order and water supply)
17				Informing the district and state authorities about potential hazards.
18				Verifying local level preparedness and reporting to the Incident Commanding Officer
19	D-48 to 24 hours (Before 2 days of Disaster)		D.D.M.C	District level Disaster Management Committee and Emergency Response Management Committee to monitor the situation.
20			I.M.D	Update and publish official early warning messages announced earlier for the next 24 hours.
21			Panchayat	Responding to early warning arrivals and prompting authorities to obtain information on the local situation.

22				Verify local level preparedness and report to Incident Commander.
23			D.E.O.C	Establish regular contact with SEOC.
24			Police	Arranging necessary equipment at rescue shelters and danger areas (boats, swimmers, first aid, etc.)
25				To identify alternative routes to reach the danger point.
26			Forest	Verify local level preparedness and report to Incident Commander.
27				Early warning to ensure that special vulnerable groups are reached.
28	D-24 to 12 hours	Search and rescue	D.D.M.C	To prepare an update plan about the possible situation
29				Dissemination of advance warning in local language about latest situation. Using mediums as mentioned earlier.
30				Providing detailed information about the crisis situation to the rescue task force and other task forces.
31				To verify whether the pre-warning has reached the final destination or not.

32				Keeping the rescue teams ready for action. Briefing each team about the place of danger and the way to reach the place to be rescued.
33				To arrange food, lodging and security for the rescue teams.
34				To keep track of the movement of each rescue unit and inform the superior officer every 6 hours.
35	D-12 to 0 hours	Warning	District Control Room D.E.O.C	Ensuring that early warning messages are being delivered consistently.
36				Monitor the situation and give latest reports about it to higher authorities, District Collector and Disaster Management Authority.
37	D+1 to 12 hours	Dispose of dead bodies	Police and Health	Supervising the operation of the rescue team and preparing a list of requirements for special machines, machinery, skilled persons, medicines, etc.
38				Gather necessary equipment and materials and deliver them to the incident level.
39				Designate an officer to coordinate with the police and local leaders to dispose of dead bodies after proper investigation and registration.
40				Coordinating with DEOC for assistance from district level for special needs of food and water.

41				Keep an extra squad ready so that you can rest at the same time.
42	D+12 to 24 hours	Relief rescue	District Development Officer and his team	Continue search and rescue operations and evacuate the casualty to safe place/hospital/relief camp as required.
43			District Superintendent of Police	Coordinate with DEOC to arrange if special medical treatment is required for affected persons.
44				Providing services by air means if required
45				To launch help line numbers and support centers
46				Assessing the situation by meeting with the local people at the cluster level and reporting to the District Officer every evening.

Task Force – Support Mechanism – Coordinates with other task forces and competent authorities to provide evacuation and relief, storage of supplies and transportation for relief.

Task Force Chairman: District Development Officer Shri.

order	Time sheet	task	Executor section	activities
1	in normal condition	division of labor and		Prepare a list of essential equipment materials during various disasters

2		In need Identification of clusters		Conducting mock drills at various levels. Coordinate with other task forces.
3	D-24 hours			Discharge and assign work to members of the work force.
4				Deploying vehicles and other equipment for short notice operations based on anticipated disaster.
5				Liaise with control room and search rescue, shelter and relief supply task forces.
5	D+24 hours			Reviewing the need for outsourced equipment.
7				Planning of support systems (workforce) keeping in mind the types of disasters
8				Carry out work planning based on continuous feedback of control and resources.
9				Continually review needs and compliments.
10				Liaison of control room and important work forces.
11				To check the quality of services.
12	D+day 2 and ahead		Reporting and final documentation	
13				Regular reporting and documentation.
14				Reassessing needs and demands.
15				Providing equipment materials as deemed appropriate

16				Hold a lecture meeting in which shelter, food and other relief supply task force.
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Taskforce – Search and Rescue (including Evacuation): Local evacuation provides manpower and critical equipment to assist in search and rescue efforts.

order	Time sheet	task	Implementing Department	activity
1	normal time	Risk assessment and sensitivity	police, revenue, Panchayat	What to do during various disasters? And what not to do? To conduct public awareness programs about it.
2				Revising contact addresses Revising resource list Monitoring of strategic advance arrangements Periodic monitoring of work plan
3				Regular repair and maintenance of equipment, machinery, purchase/provision of special machinery.
4			DEOC, Police	Training and capacity building of special teams and self-service personnel with time-to-time evolving search-and-rescue methods.
5	D – 72 to During D-0	Assessment of the situation	Resident Additional Collector	Planning for search and rescue training.
6				Assessing risk and taking action.
7				Coordinating with various departments to arrange for special forces if required for search and rescue.

8				Control Room Management: Coordinating and working with external expert team, military contingent, fire department, civil defense, police force etc.
9	D+1 to 24 hours	Law and order	District Superintendent of Police	In case of emergency without prior warning, to urge the rescue forces to reach the scene immediately with their equipment and machinery.
10				If necessary cordon off the incident site.
11				Urgent task force at every level (district, taluka, village) regarding disaster.
12				Search and rescue to start operations to move to a safe place.
13				Making arrangements for crowd control.
14			District Education Officer	Evacuate the affected to a safe place.
15				Verify local level preparedness and report to Incident Commander.
16	D+24 hours and ahead	All levels of reporting operations	Resident Additional Collector	To prepare regular reports on the functioning of the Task Force.
17				Continuing staff rotation.
18				Continuous review and evaluation of performance
19				Preparation of final report. Thanks to various stakeholders for their support.

Taskforce – Damage Assessment, Survey and Documentation

Officer-in-Charge of the Work Force: Executive Engineer, Roads and Buildings

order	Time sheet	task	Implementing Department	activities
1	in normal condition		D.E.O.C	Obtaining and assessing the damage assessment sheet prepared by the state authority. Forming four types of teams to assess (1) Private buildings and structures (2) Roads, bridges, telephone communication and public buildings (3) Agriculture and water resources (4) Industry and Commerce
2				Preparation of list including addresses and telephone numbers of persons who can assess the damage.
3	D+24 hours	Damage assessment	R&B and PWD and Panchayat	Prepare an estimated cost sheet of personal and other resources required for damage assessment.
4				The damage assessment team will prepare a preliminary damage assessment using the Pre-Preparation Format for Assessment.
5				Forwarding the preliminary damage assessment report to the higher authority
6				Amendments to the preliminary assessment to obtain opinions on the severity of the increase and loss. To inform the higher authority for any clarification in the assessment details.

7	D+24 to 72 hours and beyond	Grievance Redressal	Panchayat (for rural area) Municipality (for urban area)	Prepare teams for damage assessment and allocate specific damaged areas.
8				For any technical information required at the time of damage assessment, giving a copy of the information to the assessor on the basis of which he can resolve the queries of the people on the spot.
9				Forming a team of data operators to computerize the damage assessment data and ensure that they enter the data without delay.
10				To make arrangements for registration of complaints and redressal of complaints at district level.
11				Constantly reviewing and evaluating until the job is done.
12				Officially submit the final report to the higher authority.

Taskforce – Relief Camp Management: (Temporary Housing, Food, Water, Electricity, Health) Psychosocial Care Officer Heading the Work Force : District Supply Officer

order	Time sheet	task	Implementing Department	activity
1	in normal times		District Education Officer/Social Welfare Officer	Determining the location of the relief camp and charting its availability and available infrastructural facilities.

2				Forming a team of people from community members, religious institutions, corporate sectors who are willing to volunteer their services in relief camp arrangements. List their names and contacts.
3				Organizing workshops to increase sensitivity towards women, children, disabled, elderly, downtrodden and minority communities in the relief camp system.
4				Liaise with government programs and other stakeholders for improvement of infrastructure at the relief camp site.
5	D-24 hours	Arrangement of relief camps	District Education Officer	Checking the location of relief camp and condition of rescue accommodation.
6				Collecting the necessary equipment based on the inspection report.
7				Forming a local team for arranging relief camps.
8				Meeting with the officials of water supply, health, electricity department at the relief camp site to take their services.
9		Counselling	District Social Welfare Officer	Creation of special team for housing and psychosocial care.

10	D 0 to D +24 hours	Housing and health related matters	Health, Panchayat, and Voluntary Institutions, District Supply Deputy Mamlatdar (All Supplies)	To hold meetings for relief camp arrangements at specific places and fix responsibilities with local organizations and volunteers. Publish report on local requirements.
11			Social Welfare Officer	Sending request to local organizations to provide food and other necessary materials.
12				Prepare a preliminary budget to support the needs of all sections of the affected. Examining the status of humanitarian issues such as water, health and sanitation, violence, and discrimination.
13				To procure resources as per the condition of relief site
14				Budgeting of personal and necessary resources so that a team does not have to work for more than 12 consecutive hours in a day.
15			Social Security Officer	Forming a local team including women, children and elderly members who will monitor the effectiveness and non-discrimination of the relief campaign.
16				Preparing daily report for support regarding the matters covered in the arrangement and delivery of new requirements and sending it to the superior.

17				Creating contingents for health, water supply, psychosocial care and housing.
18	D+1 day and ahead	Verification of the need for relief camps	Panchayat and Health Department	To determine the future course of action in consultation with the local people on the necessity or closure of the relief camp.
19				To carry out all the above tasks while the relief work is in progress.
20			Social Security Officer	To prepare weekly and fortnightly reports on psychosocial care and health.

Taskforce – provides staff and resources on public health and sanitation-related issues. Restores normal medical care regime.

Officer Heading the Task Force : Chief District Health Officer.

order	Time sheet	task	Implementing Department	activity
1	General condition D-24 hours	Verification of medically necessary quantities	Department of Health	Making a list of address and contact details of doctors, nurses, private and government hospitals and availability of beds and ambulances.
2				Enrollment of trained volunteers for first aid services.
3				Conducting meetings on matters of public health and sanitation and making estimates of personnel and resource requirements.

4				Coordinate with Camp Management Taskforce to provide necessary volunteers, first aid kits and other sanitation services. Appoint an officer to coordinate with the police and local leaders. Who disposes of dead bodies after proper investigation and registration. All P.M. To make alternative arrangement of electrical connection at the unit.
5	D+24 hours	Task sharing and identification of required clusters	At THO and PHC level	Creation of Health and Sanitation Committee at District Headquarters.
6				Monitoring health and sanitation situation at all locations and making daily reports. Conduct daily meetings at the district headquarters to understand the situation and prepare a response plan.
7				Prepare report along with budget for water supply, sanitation promotion, child care and other needy needs.
8				If they require assistance, write a request letter to the district authority for assistance.
9				Coordinating with rescue forces and camp management to ensure no compromise on issues related to public health (such as clean water, sanitation, services, proper disposal of solid waste).

10				Providing basic necessities (such as public health and sanitation etc.) in relief camps and other settlements.
11	D+ Day 2 and ahead	Reporting and final documentation	CDHO, BHO and Medical Officer	Ensuring that physical infrastructures that facilitate health are damaged, if any.
12				Conduct cleanliness campaign by forming cleaning squad.
13				Constantly reviewing and re-evaluating work.
14				All services to continue uninterrupted till the situation returns to normal. Termination of public health services after meeting with all stakeholders.
15				Preparation of final report.

Taskforce – Animal Health and Welfare – Provision of health and other care of disaster affected animals

Officer Heading the Task Force :- Deputy Director Animal Husbandry

order	Time sheet	task	Implementing Department	activity
1	normal time			Preparation of list of animals and their health details and taking precautionary measures.
2				To prepare a list and contact list of animal health workers.
3				Preparation of list of cages for cattle.

4	During D 0 to D+72 hours	Quantity Verification	Deputy Director, Animal Husbandry	Spread the word about insurance.
5				Identifying vulnerable areas and developing strategies for response.
6				Arrangements for transportation to move affected cattle.
7				Regarding cattle relief, provision of fodder, water and medicine
8				Be careful not to spread epidemics in animals
9				Reviewing response performance
10				Documenting and conducting case studies of the impact of disasters on livestock and related livelihoods.

Taskforce – Water Supply Department – Provision of water.

Officer Heading the Work Force:- Executive Engineer-Water Supply and Sewerage Board

order	Time sheet	task	Implementing Department	activity
1	normal time	Verification of required quantity of water	Water Supply Department	Establishment of Water Availability, Capacity and Sanitation (Workforce)
2				Alternative Schemes for Water Distribution and Storage (Task Force)
3				Commissioning of new and additional equipment (work force)
4				Maintain sufficient supplies and equipment for use of chemicals. (Manpower)

5				Hierarchy and shift system of employees
6				Creating public awareness about water consumption.
7				Advising Government and Private Sectors on Conservation of Water Supply.(Task Force)
8				To discharge the members of the Task Force
9				Checking additional support system personnel and vehicles (Support System Task Force)
10				of power supply and coordination with other task forces
11				Status and Conservation of Water Resources (Task Force)
12	D+24 hours	Task sharing and identification of required clusters	Water Supply and Municipal Board	Water Supply Planning and Prioritization of Water Users (Workforce)
13				Water Supply System Status and Damage Assessment (Workforce)
14				Employing Water Tankers (Work Force)
15				Repair/Rehabilitation of Water Supply System (Plan Based)
16				Distribution of Supply Stations / Distribution Safety
17				Ensuring water distribution system workforce.

18				Coordinating provision of information on water distribution and storage and safe use of water.
19	D + Day 2 and ahead	Reporting and final documentation	Water Supply and Municipal Board	Establishing a temporary water supply system.
20				Pay attention to permanent water supply quantity.
21				Long-term rehabilitation plan and meeting requirements. (work force)
22				Initiating reporting and documentation.(Workforce)
23				Lecture Meeting (Workforce and others)
24				Final Report (Task Force)

Taskforce – Power Supply – To restore normal power supply in the affected area

Officer Heading the Work Force: Superintending Engineer MGVCL Gujarat Electricity Board.

order	Time sheet	task	Implementing Department	activity
1	in normal condition		MGVCL Gujarat Vidyut Board	Develop inventory of current status of power supply system and receiving locations
2				Conduct monthly meetings
3				Develop a contact list
4				Conducting informal risk and threat assessments/assessments

5				Develop disaster planning.
6	D-24 hours	Verification of quantity required	MGVCL Gujarat Vidyut Board	Assessing impacts as per standard operating procedures.
7				Prioritizing response measures
8				Take necessary measures to ensure that the electricity supply is not disturbed.
9				To perform additional tool assembly/resources
10				Ensuring about unforeseen contingencies
11	D+24 hours	Task sharing and identification of required clusters	MGVCL Gujarat Vidyut Board	To revise the plan based on information and evaluation of performance.
12				Monitoring of action / action status
13				Dissemination of information to the public.
14				Ensuring safety as required.
15				Maintain constant liaison with Control Room and HQ of GV Board regarding requirements, requirements and receipts.
16				To check for improvements in efforts.
17				Creating an intermediate coordinate system.
18				Conduct regular coordination meetings with other stakeholders.

19				Initiate formal documentation of efforts.
20				To make alternative arrangements for power supply at relief camps / shelters.
21				Review for changes in planning for safety
22				A plan to normalize the situation, including additional safeguards if necessary.

Taskforce :- Public construction – will provide the necessary manpower and equipment to assist in local efforts to restore normal operating infrastructure.

Officer-in-Charge of the Work Force Executive Engineer Roads and Buildings

order	Time sheet	task	Implementing Department	activity
1	In normal condition			Prepare inventory of personnel, equipment and infrastructure
2				Determining alternative routes for transportation and presenting maps.
3				Conduct post-disaster inspections of infrastructure on a priority basis.
4				Planning and maintaining equipment and manpower
5				Provision of other facilities for sanitation and shelter.
6	D – 24 hours	Verification of quantity required		To release employees and work forces.

7				Establish a control room.
8				Liaise with District Control Office.
9	D + 24 hours	Distribution of work and identification of clusters of needs		Keeping and dispatching teams on priority basis.
10				Initiating damage assessment and inspection.
11				Develop action plan and liaise with control room.
12				Initiate hierarchical system of staffing and manpower planning.
13				Establish a control room.
14				Providing information regarding roads, access and infrastructure.
15	D + Day 2 and ahead	Reporting and documentation	(Shelter Managers)	Conduct detailed costing.
16				Improvement Repair and replacement of equipment and other equipment assets
17				Lecture meeting
18				Preparation of final report.

Taskforce - Shelter: Provides equipment and supplies to provide temporary shelter to disaster-affected communities.

Officer Heading the Task Force: District Primary Education Officer.

Implementing the Task Force District Primary Education Scheme						
order	Time sheet	task	Implementing Department	activity		
1	in normal condition	Distribution of work and identification of clusters of needs		Develop a working methodology for shelter management.		
2				Develop a list of location, capacity etc. of shelters.		
3				Providing information about shelters to other task force officials.		
4				Develop a methodology for shelter management.		
5	D – 24 hours					Recruiting Shelter Managers (Workforce)
6						To initiate shelter location as instructed
7						Mobilization of additional resources for shelters and camps.
8						To make people aware about the location and status of shelters.
9						To discharge the shelter managers.
10						To initiate shelter location as instructed.
11	D + 24 hours	Reporting and documentation	(Shelter Managers)			Initiation of admission of dependents into shelters.

12				Plan for prioritization of shelter use.
13				Coordinating with other task force (task force) for water supply, food, health safety,
14				Providing support and assistance to dependents.
15				Continuation of Operations (Workforce)
16	D + Day 2 and ahead			Monitoring the status of shelters and movement of people (Taskforce)
17				Employ additional equipment
18				Prepare equipment as deemed fit. (Work force)
19				Initiation of improvement / repairs in the condition of shelters.(Task force)
20				lesson
21				Final report

Chapter 8 : Reconstruction, Rehabilitation and Recovery Measures.

DDMP typically stands for Disaster Management Plan. Here's how reconstruction, rehabilitation, and recovery measures might be addressed within the framework of a Disaster Management Plan:

Reconstruction:

Assessment and Prioritization:

Conducting damage assessments to identify areas requiring reconstruction and prioritizing projects based on their impact on community resilience and recovery.

Resource Mobilization: Mobilizing resources, including funding, materials, and manpower, for reconstruction efforts through government budgets, international aid, and public-private partnerships.

Infrastructure Restoration:

Implementing engineering and construction projects to rebuild damaged infrastructure, including roads, bridges, schools, hospitals,

and utilities, using resilient designs and materials.

Housing Reconstruction:

Developing housing programs to provide shelter solutions for displaced populations, including the construction of temporary shelters, transitional housing, and permanent housing units.

Timeline and Monitoring:

Establishing timelines and milestones for reconstruction projects and implementing mechanisms for monitoring progress and ensuring accountability.

Rehabilitation:

Healthcare Services: Restoring and enhancing healthcare services, including hospitals, clinics, and emergency medical response systems, to meet the needs of disaster-affected populations.

Psychosocial Support: Providing psychological first aid, counseling services, and community-based

psychosocial support programs to address the mental health and psychosocial needs of disaster survivors.

Livelihoods and Economic

Recovery: Supporting the recovery of livelihoods and economic activities through job creation programs, vocational training, microfinance initiatives, and support for small businesses and agricultural activities.

Environmental Rehabilitation:

Implementing projects to rehabilitate and restore natural habitats, ecosystems, and agricultural lands affected by the disaster to promote environmental sustainability and resilience.

Recovery:

Capacity Building: Strengthening the capacity of local communities, government agencies, and relevant stakeholders to prepare for, respond to, and recover from future disasters through training, awareness campaigns, and institutional development.

Risk Reduction and Preparedness:

Implementing measures to reduce disaster risk and enhance preparedness, including the development of early warning systems, land-use planning, building code enforcement, and infrastructure improvements.

Policy and Legislative Reform:

Reviewing and updating disaster management policies, laws, and regulations to improve coordination, governance, and accountability in disaster response and recovery.

Community Resilience: Promoting community resilience through social cohesion, inclusivity, and participation in decision-making processes, including the establishment of community-based disaster management committees and networks.

These measures are typically outlined in a comprehensive Disaster Management Plan developed by government agencies, disaster management organizations, and other stakeholders, with input from

experts, communities, and affected populations. The plan should be flexible and adaptive to address the specific needs and challenges of different types of disasters and contexts. Regular reviews, updates, and exercises are essential to ensure the effectiveness of the plan and enhance overall disaster resilience.

Recovery encompasses both short-term and long-term efforts for the rebuilding and revitalization of affected communities. Recovery planning must provide for a near-seamless transition from response activities to short-term recovery operations—including restoration of interrupted utility services, reestablishment of transportation routes and the provision of food and shelter to displaced persons. Planners should design long-term recovery plans to maximize results through the efficient use of resources and incorporate national recovery doctrine. Following should form a part of this section:-

- Damage assessment mechanism

- Restoration of basic infrastructure

Short term - Restoration of Basic Infrastructure including roads, bridges, drinking water supply, electricity, communication network and roads/paths leading to the villages; Restoration/ Repair of the lifelines/critical buildings – repair/reconstruct the lifeline buildings /critical buildings which are necessary for treating the affected people or rehabilitation in these buildings as shelters.

- Reconstruction and Repairs

- Recovery program The nodal departments are to be assigned the responsibilities of reconstruction and restoration activities and perform these activities and restore the minimum basic infrastructure in the area which is vital for sustaining human life in the area. These departments are Health & family welfare, Social Welfare Department, MeECL, PWD Roads and Buildings, Water Resources, PHE Department and all other relevant departments in the district.

Chapter 9: Financial Resources for implementation of DDMP

District Disaster Response Funds and District Disaster Mitigation Funds are proposed to be created at the District Level as mandated by Section 48 of the DM Act. The disaster response funds at the district level would be used by the DDMA towards meeting expenses for emergency response, relief, rehabilitation in accordance with the guidelines and norms laid down by the Government of India and the State Government. All State Government Departments, Corporations and ULBs would prepare their DM plans including the financial projections to support these plans. The necessary financial allocations would be made as part of their annual budgetary allocations and ongoing programmes and should be used for mitigation and preparedness measures. They will also identify mitigation projects and project them for funding in

consultation with the SDMA/DDMAs to the appropriate funding agency. The guidelines issued by the NDMA vis-a-vis various disasters should be considered while preparing mitigation projects. DDMA should look at other options of new financial tools like catastrophe risk financing, risk insurance, micro-insurance etc. to compensate for massive losses on account of disasters.

CHAPTER 10: PROCEDURE AND METHODOLOGY FOR MONITORING, EVALUATION, UPDATION AND MAINTENANCE OF DDMP

Evaluating the effectiveness of plans involves a combination of training events, exercises etc. to determine whether the goals, objectives, decisions, actions and timing outlined in the plan will result in an effective response. Guidelines for monitoring and evaluation of the plan are as given below:

- Regularly review the implementation of the plan.
- Check the efficacy of the plan after any major disaster/emergency in the district and see what did work and what did not work and make amendments to the plan accordingly.
- As per Sub Section (4) of Section 31 of the Disaster Management Act, 2005, the plan would be reviewed and updated annually and the year in which the plan has been reviewed would be clearly mentioned in shape of header in each page of the plan.
- Keep India Disaster Resource

Inventory (IDRN) updated and connected with the plan.

- Update coordinates of responsible personnel and their roles/responsibility every six months or whenever a change happens. Names and contact details of the officers/officials who are the nodal officers or the in-charge of resources to be updated on regular basis.
- Plan should be web enabled with access on intra and internet.
- Plan should be circulated to all stakeholder departments, agencies and organizations so that they know their role and responsibilities and also prepare their own plans.
- Regular Drills/exercises should be conducted to test the efficacy of the plan and check the level of preparedness of various departments and other stakeholders.
- Regular training and orientation of the officers/officials responsible to

implement the plan should be done so that it becomes useful document to the district administration.

- Army, NDRF, SDRF and other agencies should be integrated into the plan exercise regularly.
- DDMA should hold Regular interaction and meetings with the Army or any other central

government agencies for strengthening coordination during disasters.

- The DEOC should be made responsible for keeping the plan in updated form and collecting, collating and processing the information.

CHAPTER 11: COORDINATION MECHANISM FOR IMPLEMENTATION OF DDMP

Dealing with a major disaster requires resources from outside the district. When the capacities of a district administration are overwhelmed, higher levels are called upon to assist. Likewise, assets and capabilities in the corporate and non-governmental sectors available around the district may be brought to bear. There are many actions undertaken by participants in disaster management that support this goal, both predisaster (to forestall or reduce potential damage) and post-disaster (to recover from actual damage) and ideally these activities would reduce the potential effects of a disaster significantly. For achieving this objective, the plan should have a pre-established and practiced mechanism for Inter, intra and extra agency coordination. Communication is the most important tool for effective coordination. Generally, Emergency

Operation centre (EOC) is the enabler of communication and coordination. EOC communication and coordination plan (EoC-SoP) should specify procedures for interfacing with different stakeholders during all phases of emergency, as stated in the DDMP framework. Pre-Disaster meetings to review the DDMP with all stakeholders should be planned.

Intra and inter-Department coordination with horizontal linkages

- Coordination mechanism with NGOs, CBOs, Self Help Groups (SHGs), Industries, private schools and hospitals with horizontal and vertical linkages
- Coordination with block/ village level Task Force(s) with vertical linkages as also inter-block and inter-village coordination with horizontal linkages
- Coordination system with state departments and training institutes at state and district level

Intra-block and intra-village coordination

- Coordination with local self government (Panchayat Raj - Zila Parishad, intermediate level, if any, and Gram Panchayat and Urban Local Bodies). The responsibilities of local authorities are already listed in the Act. However, these local

authorities are required to function “subject to the direction of district authority” (section 41); hence the need for a vibrant coordination system at these levels.

- Linkage with DDMPs of neighboring districts
- Linkage with SDMP

Chapter 12: Standard Operating Procedures (SOPs) and checklist

SOPs and checklists could be prepared for various stakeholders' effective response. These can be made based on the functioning of Emergency Support Function (ESF) groups or Incident Response System (IRS). Depending on the hazard profile and level of exposure the district should decide in a participatory way the number of ESF covering all the above. The SOPs would briefly describe the following:

- Definition of disaster situations
- Action on receipt of warning and warning dissemination;
- Process to access financial and technical resources (departments and stakeholders) for emergency response;
- Roles and responsibilities of the department or/and stakeholders in emergency response;
- Information management and dissemination strategy;
- Media management strategy during emergency response;
- Request for state government assistance
 - Relief and Rehabilitation Norms (Standards) Emergency Response/ Support Functions:
 - o Evacuation o Search and Rescue o Cordoning the area o Traffic control o Law and order and safety measures o Dead body disposal o Carcass disposal o (Add more if necessary)
 - Humanitarian Relief and Assistance:
 - o Food
 - o Drinking Water
 - o Medicines
 - o Trauma care
 - o Clothing
 - o Other essential needs
 - o Shelter Management
 - o Providing helpline
 - o Repairs and restoration of basic amenities (e.g. water, power, transport etc)

- o Management of VIP visits
- o Maintenance of Emergency reserves including by private agencies

12.1 STANDARD OPERATING PROCEDURES (SOPS)

Standard Operating Procedures (SOPs) are a common method of implementing instructions. SOPs provide response protocols for carrying out specific responsibilities. They describe who, what, when and how SOPs are appropriate for complex tasks requiring step-by-step instructions for performing a task.

12.2 SOP FOR EARTHQUAKE (WITHOUT WARNING SITUATION)

Earthquakes can neither be predicted nor prevented. When an earthquake strikes, the district team must be ready to respond. To survive, the administration and neighbourhood community members should be prepared with survival plans'. The basic approach should be: (a) Avoid injury to self and help others;

- (b) minimize damage to Critical Infrastructure and Key Resources (CIKR) installations and property;
- (c) Be prepared to survive and function for at least 72 hours after an earthquake without help from external aid.

12.3 SPECIAL HAZARDS/PRECAUTIONS

- Earthquake impact can cause damage to critical infrastructures including telecom, power transmission, water supply, gas or oil pipelines resulting in pipe rupture or blast from ignition of accumulated associated well gas and vaporization of crude oil pool.
- Each agency must immediately shut down all operations and supply in pipeline / transmission lines as per their on-site emergency response plan.
- Depending upon the intensity,

12.4 EMERGENCY RESPONSE RESOURCE REQUIREMENTS

- Emergency Communication - Sat phones for wide area communication, Wireless for local area communication.
- Fire management services -Mobile fire protection system
- Specialised resources – SAR, Specialised equipments for SAR
- Manpower- Additional fire fighters/support personnel
- Medical – Ambulances, Doctors, Nurses, Stretchers, Pharmacy supply / First aid kits
- Law and Order –Police

12.5 INCIDENT ACTION PLAN

Task/Function/Activity	Department/Officer Responsible
Raise alarm	
The staff to follow 'drop-cover-hold' procedures and assemble at pre-designated safe muster points	All staff
Emergency Alarm/Notification/ Notify Authorities & external agencies	RO/IC/EOC
Issue instructions to shut down all operations immediately on CIKR	RO/IC/EOC
Activate IRTs	RO/IC
Assess situation, make evacuation plan and evacuation	IRT
Activate special resources for SAR including JCBs, Earth-movers, Steel cutters	IRT
Coordinate and mobilize specialized medical teams with mobile operation theatres	IRT
Coordinate and mobilize transport and logistics	IRT
Assess Hazards – potential for leakage and consequent explosion	IRT
Cordon off the area – Establish “hazard zone” and secure area from unauthorized entry.	IRT
Community Evacuation Plan	Community
Trigger alarm/early warning siren and evacuate community to pre-designated open ground	Community & IRT
Ensure speedy coordination for evacuation	IRT
Attend the injured with first aid and transport them to hospital	IRT
Assure the people by sharing the real impact of incident and seek their cooperation	IRT
Provide temporary shelter with water, food and sanitation facilities	IRT
Conduct Damage Assessment	IRT
Only after thorough check-up and formal clearance, community can be permitted to return to their habitation	IRT

12.6 SOP FOR FLASH FLOOD/THUNDERSTORM/THUNDERSQUALL/ CYCLONIC STORM (WITH WARNING SITUATION)

Precautions:

- Flooding can disrupt continuity of Governance and the life of the community
- Flooding can lead to disruption in electrical supply and communication and cause damage to roads, bridges and other infrastructure.
- Depending upon the level and quantum of water inundation evacuation required for community to move to safe zones.
- Search and rescue teams to be kept in standby for any emergency rescue operations
- Emergency coordination team to monitor the situation
- Ensure that drainage channels / nallas are de-silted and bunds are periodically maintained.

12.7 EMERGENCY RESPONSE RESOURCES:

- Specialist Resources -Search and rescue teams (divers/swimmers, Emergency Medical; Specialized equipment- like boats, life jackets (helicopters), etc.
- Manpower -Support Personnel
- Medical Support -Ambulances (complete with emergency medication), Doctors, Nurses, Stretcher Bearers, Oral Rehydration Satchets (ORS)
- Law & Order Agencies -Police
- Other Essentials -Water storage tanks, Chlorine tablets , Temporary shelters with sanitation facilities, Temporary common kitchen or food packets

12.8 INCIDENT ACTION PLAN

Task/Function/Activity	Department/Officer Responsible
Raise alarm/Mass messaging/Community siren system	IPR
Look out for regular updates from Indian Meteorological Department (IMD) and Central Water Commission (CWC) for forecast and follow up action	EOC/IPR/IMD
Alert all IRT & ESF to start working on their role	RO/IC

Raise alarm if water level is reaching critical level of jeopardizing safety of infrastructure	IRT
Assess situation, make evacuation plan and move community to safer zones	IRT
Activate special resources <ul style="list-style-type: none"> • Search and rescue (divers/swimmers, boats, life jackets, searchlights, nylon ropes) • Specialized equipment (helicopters, sandbags, crowbars, spades, portable motor pumps) 	IC
Close / cordon flooded roads and areas from entry	IRT
Assess situation hour to hour in close contact with IMD/CWC and other agencies	IRT
Conduct damage assessment	IRT
Only after thorough check-up and formal clearance, community can be permitted to return to their habitation	IRT

District Administration Chhotaudepur (STD Code :02669)

Sr. No.	Designation	Name	Office	Residence	Mobile	Fax No.	Email ID
1	2	3	4	5	6	7	8
1	Collector	Shri Anil Dhameliya, IAS	233003	233003	9978405937	233002	collector-cho@gujarat.gov.in
2	DSP	Shri I G Shaikh (IPS)	233077		9978405977		control-sp-cpr@gujarat.gov.in
3	D D O	Shri Sachin Kumar, IAS (I/C)	233050	240005	9978406468	233251	ddochhotaudepur@gmail.com
4	DySP (H.Q.)	Shri D K Rathod	233104		9909409710		
5	Resi. Addl. Collector	Shri S.D.Goklani	233004		7574953262	233002	collector-cho@gujarat.gov.in
6	DRDA	Shri.K.D.Bhagat	232755		9825668196		drdachhotaudepur@gmail.com
7	DSO	Shri A. I. Halpati	232626		9924998569		dsochhota@gmail.com
8	Dy. DDO (Revenue)	Smt Sejal G. Sangada	233023		6354807131		daoachhotaudepur@gmail.com

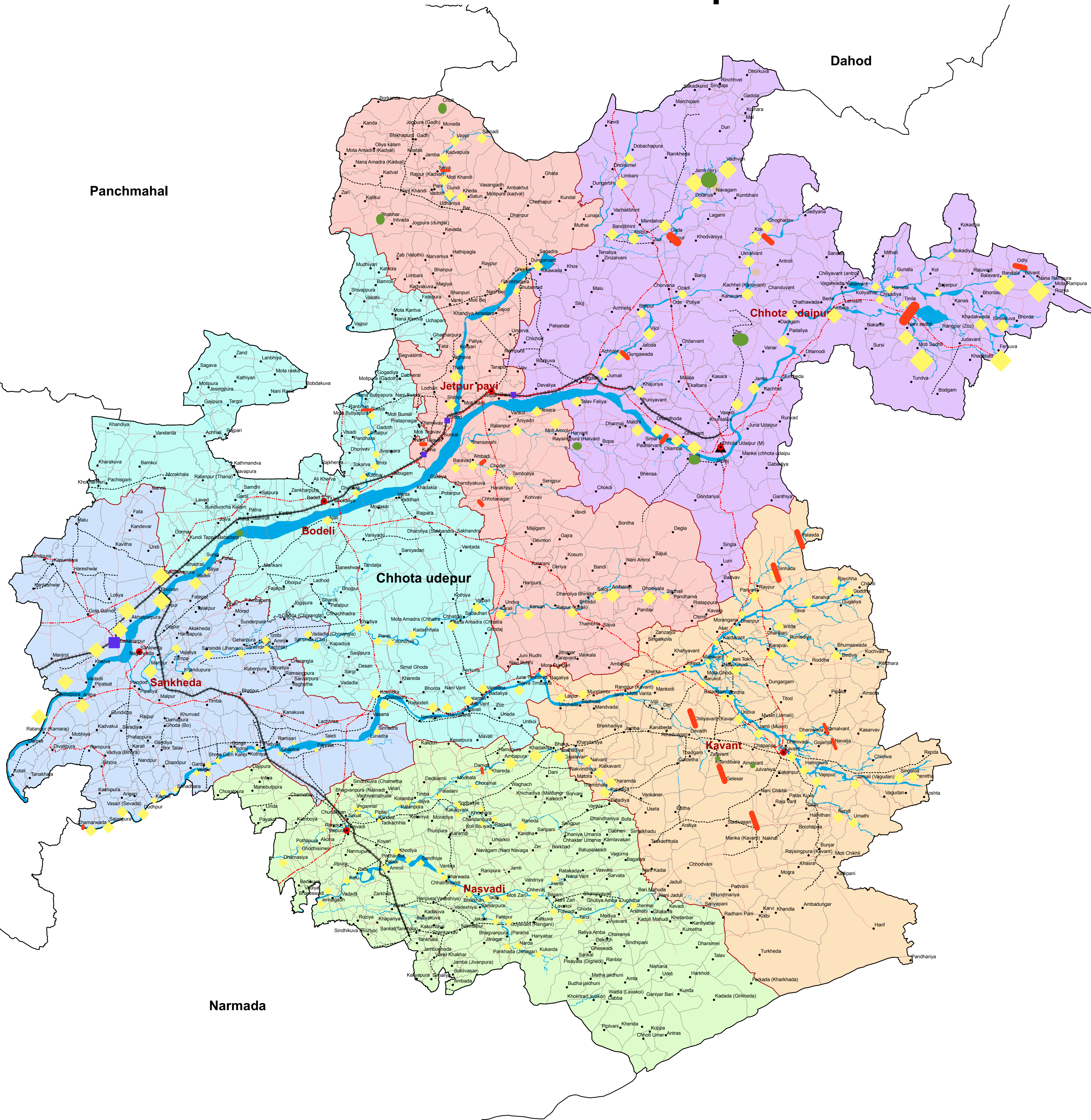
9	CDHO	Shri C.B. Chobisa			9375101163		dho.health.chhotaudepur@gmail.com
10	DEO	Shri. Anandkumar M. Parmar	232137		9909970387		deochhotaudepur@gmail.com
11	DPEO	Shri. J. K. Parmar	232137		9428363584		dpochhotaudepur@gmail.com
12	General Manager DIC	Shri Shaktisinh J. Thakor (I/C)	233640		7567528160		gm-dic-chh@gujarat.gov.in
13	Dy.Dir .Info	Smt. Margi Rajput			8905886267		infochhota@gmail.com
14	Chief Fire Officer	Shri Bhavik Barjod	232059		7777924028		Np.cudepur@yahoo.com
15	Mam. Disa.	Shri R.P. Baria	233012 , 233021		9824404325		disasterchhotaudepur@gmail.com
16	DPO	Shri Dhrupen Patel	233012 , 233021		9727117711		disasterchhotaudepur@gmail.com

Taluka Name	Designation	Officer Name (Shri)	Code	Office	Mobile	Police Station	Email ID
Chhota udepur	Prant Officer	Shri Vimal Barot	02669	232010	9978405358	Chhotaudepur 02669- 232068	prantoffic echhotau depur@g mail.com
	Mamlatdar	Shri.R.R. Bhabhor	02669	232031	9978439325		mam- chotaude pur@guja rat.gov.in
	TDO	Smt Punambe n Damor	02669	232041	8866827075		tdo- chhotaud epur@gm ail.com
	Chief Officer	Shri Bhavik Barjod	02669	232059	7777924028		np_cudep ur@yahoo .com
Jetpur Pavi	Prant Officer	Shri Vimal Barot	02669	232010	9978405358	JetpurPavi 02664- 242133	prantoffic echhotau depur@g mail.com
	Mamlatdar	Smt Hanshabe n R. Rathod	02664	242828	7574953450		mam- jetpur- pavi@guja rat.gov.in
	TDO	Shri Parasbhai Patel	02664	242123	8511515315		tdo- jetpur@gu jarat.gov.i n
Kavant	Prant Officer	Shri Vimal Barot	02669		9978405358	Kavant 02669-	prantoffic echhotau depur@g mail.com

	Mamlatdar	Shri. Dr. Amitkumar Chaudhari	02669	254254	7574953394	246101	mam-kwant@gujarat.gov.in
	TDO	Shri Tapan Trivedi	02669	254595	8141445378		Tdo-kwant@gujarat.gov.in
Bodeli	Prant Officer	Smt.Maitridevi N. Sisodiya	02665	222040	7574953287	Bodeli 02665- 220333	prantofficebodeli@gmail.com
	Mamlatdar	Shri. H. S. Shaikh	02665	222030	9979570770		mamlatdarofficebodeli@gmail.com
	TDO	Shri Bhaumikbhai Patel	02661	221345	9426423325		Tdo-bodeli@gujarat.gov.in
Nasvadi	Prant Officer	Smt.Maitridevi N. Sisodiya	02669	232010	7574953287	Nasvadi 02665- 220333	prantofficebodeli@gmail.com
	Mamlatdar	Shri. M.B. Patil	02665	7874536192	7574953384		mam-nasvadi@gujarat.gov.in
	TDO	Shri. Harishbhai Talati	02665	272032	9879319860		tdo-nasvadi@gujarat.gov.in

Sankheda	Prant Officer	Smt.Maitridevi N. Sisodiya	02665	222040	7574953287	Sankheda 02665- 243233	prantoffic ebodeli@g mail.com
	Mamlatdar	Shri D.A. Patel	02665	243159	7574958001		mam- sankheda @gujarat. gov.in
	TDO	Shri. Jigarbhai Prajapati	02665	243228	9662514208		tdo- sankheda @gujarat. gov.in

Chhota udepur District



Legend

- Settlement
- Taluka Head Quarter
- ▲ District Head Quarter
- Village Boundary
- Taluka Boundary
- District Boundary
- Road**
 - Expressway
 - National Highway
 - State Highway
 - District Road
 - Village Road
- River
- Railway
- ◇ Village Near Riverbank
- CAUSEWAY
- RAIL UNDER PASS
- DAM SITE

Data Source:



Settlement commissionerate and Land Record

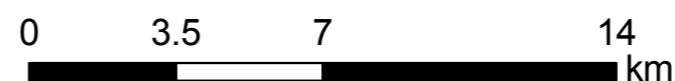
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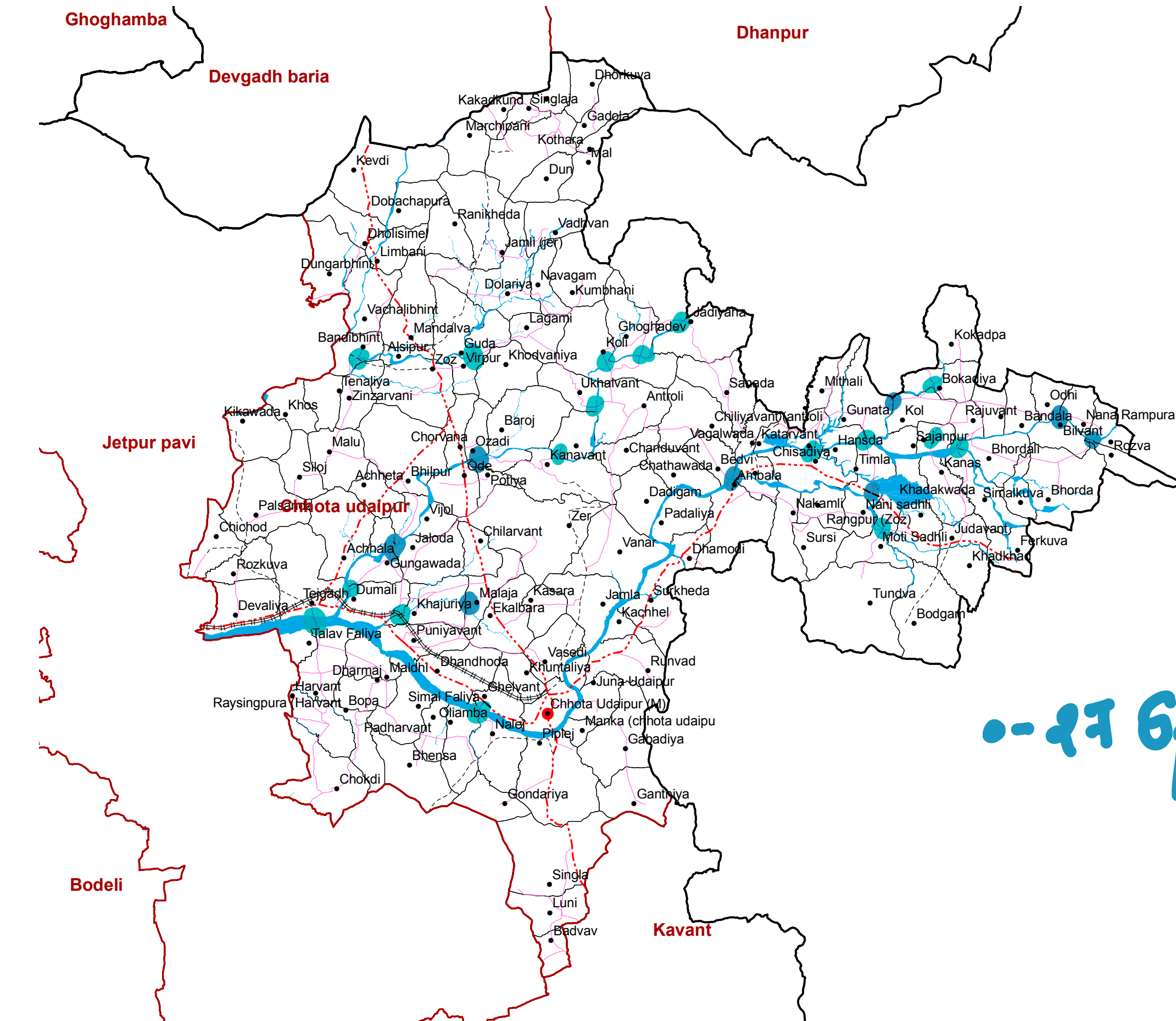
Map not to Scale

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Prepared By:

Settlement commissionerate and Land Record



Legend

●	Settlement
●	Taluka Head Quarter
□	Village Boundary
□	Taluka Boundary
□	District Boundary
~	River
≡≡≡	Railway
Road	
==	Expressway
—	National Highway
---	State Highway
---	District Road
---	Village Road

.. 27 Gpots.

Data Source:



Settlement commissionerate and Land Record

Prepared By:





Legend

- Settlement
- Taluka Head Quarter
- Village Boundary
- Taluka Boundary
- District Boundary
- ~ River
- ≡≡≡ Railway
- Road**
 - Expressway
 - National Highway
 - State Highway
 - District Road
 - Village Road

Data Source:



Settlement commissionerate and Land Record

Prepared By:



@Rikesh_Patel

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!	Settlement
!	Taluka Head Quarter
	Village Boundary
	Taluka Boundary
	District Boundary
	River
	Railway
Road	
	Expressway
	National Highway
	State Highway
	District Road
	Village Road



Prepared By:



@Rikesh_Patel



●	Settlement
●	Taluka Head Quarter
	Village Boundary
	Taluka Boundary
	District Boundary
	River
	Railway
Road	
	Expressway
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	State Highway
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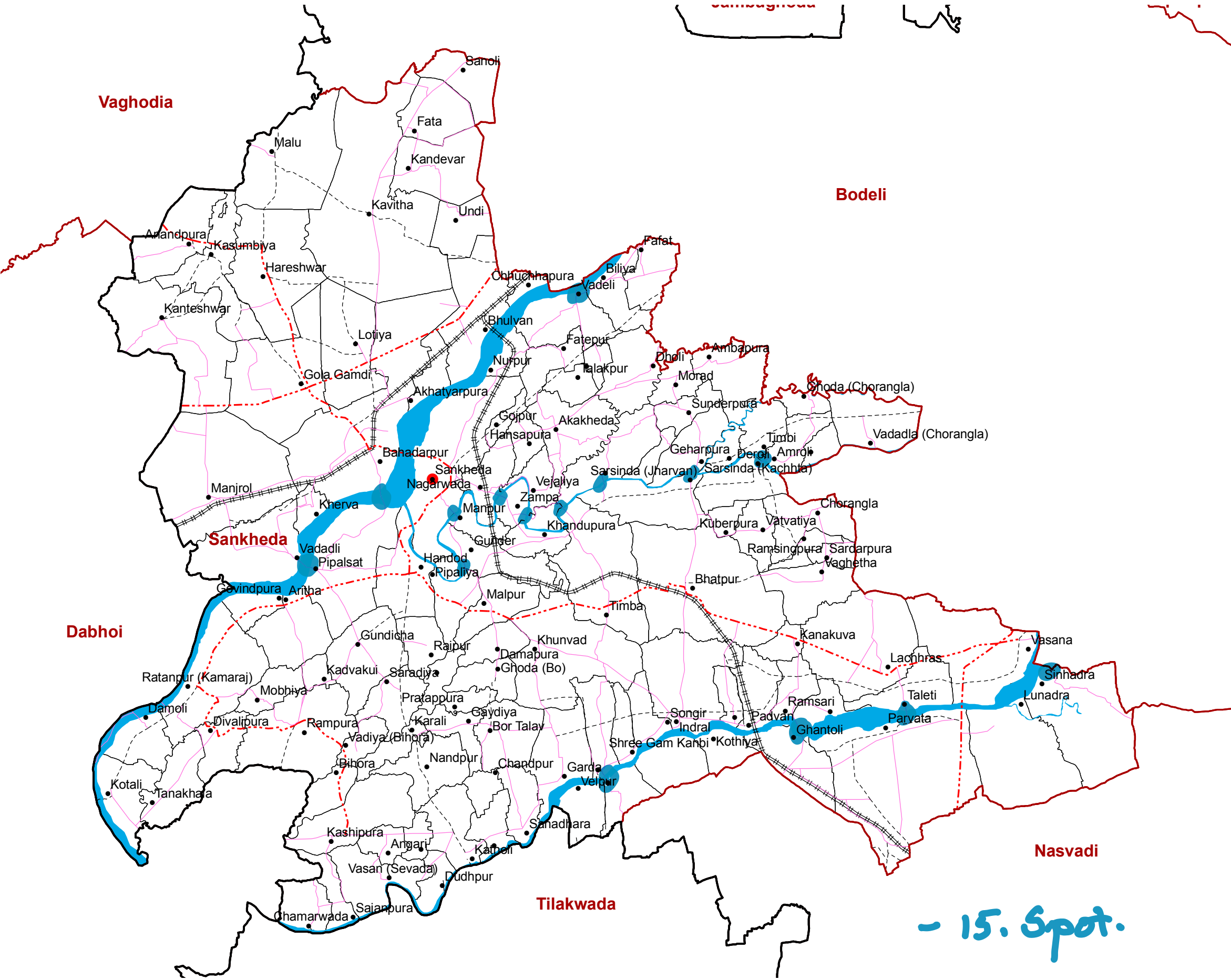
Prepared By:



A number line is shown with markings at 0, 3, 6, and 12 km. A black bar is drawn from 0 to 3 km, and another black bar is drawn from 6 to 12 km. The segment from 3 to 6 km is white.

@Rikesh_Patel

- 17 spot.



Legend

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Settlement

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Taluka Head Quarter

Village Boundary

Taluka Boundary

District Boundary

River

Railway

Road

Expressway

National Highway

State Highway

District Road

Village Road

Data Source:



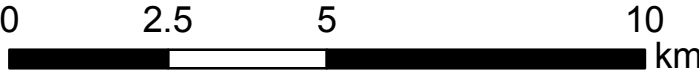
Settlement commissionerate and Land Record

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ISO 9001:2008
ISO 27001:2005
CMMI Level-3

@Rikesh_Patel



- 15. Spot.