DISTRICT DISASTER MANAGEMENT PLAN 2024 MANISAGAR





DISTRICT EMERGENCY OPERATION CENTER COLLCTOR OFFICE, MAHISAGAR



FOREWORD



Ms.Neha Kumari (IAS)

Mahisagar District came into existence as a 28th Newly formed district of Gujarat State on 26th January 2013. it came in full-fledge operational mode on 15th August 2013 completely by Lunawada, capital of district Mahisagar. The district of Mahisagar has been carved out of two districts, Panchmahal and Kheda. Mahisagar District is named by its holy Mahisagar River.

In recent years, the Government of Gujarat has been increased focus towards the Disaster Management and other related aspects, and has adopted a "Zero-casualty approach in response to calamities." Experience has shown that Pre-planned and practiced procedures for handling an Emergency can considerably reduce Loss of Life and minimize damage too.

Gujarat State Disaster Management Authority implemented the Disaster Risk Management Program in the State and Mahisagar District, the programme has four DRM components; Capacity Building, Awareness Generation, Mock drill and Plan Preparation. Under the programme Collector office, Mahisagar preparing the Communities and Government Officials from grass root level to top level for securing quick response mechanism right from bottom to top level. As a part of Disaster Risk management, all the Villages, Taluka and City Level Disaster Management Plans have prepared and are being updated every Year.

The "<u>District Disaster Management Plan-2024</u>" is a summary document provide the details about the hazards, its history, vulnerability analysis, risk assessment and Flood Management strategy and mitigation plan. I hope this document shall go a long way in helping the District administration to tackle the disaster situation in a systematic and smooth manner.

Neha Kumari (IAS) Collector-Mahisagar

Date :30/04/2024.

INDEX

Sr. No	Description			
1	List of abbreviations/ acronyms	7		
2	Introduction	11		
3	Need for the Plan	11		
4	Prime Minister's 10 Point Agenda towards Disaster Risk Reduction	14		
5	Plan Activation	16		
6	Plan Implementation	17		
7	Aims and Objectives	18		
8	Mandatory Provisionsof the Disaster Management plan	18		
9	Concept of disaster management	18		
10	Approach to disaster management	21		
11	Policy and responsibilities	21		
12	Authority and responsibilities	22		
13	Warning, reliefand recovery	22		
14	Mitigation, preparedness and prevention	22		
15	Plan Review and Updation	23		
16	Financial Arrangements	23		
16	Scope Of Plan	24		
17	Trigger Mechanism	24		
18	Hazards, Vulnerability and Risk Assessment	26		

19	Capacity Analysis	28
20	Preparedness, Preventionand Mitigation Measures	34
21	Key activities during PRE, DURING and POST Disasters	37
22	Electronic Support for resources utilization & information	39
23	Response Planand Institutional Mechanism	46
24	Incident Response System	49
25	Alert Mechanism	58
26	Task force Response Planning	68
27	Standars Operating Procedures	101
28	Disaster Specific Action Plans	110
29	Flood hazard Action Plan	110
30	Earthquake Action Plan	114
31	Cyclone hazard Action Plan	117
32	Biological Disaster Action Plan	118
33	Oil Spill & Mine Disaster Action Plan	119
34	Tsunami Action Plan	119
35	Heat Wave Action Plan	119
36	Linkages with Other Stakeholders	122
37	Partnership and Linkages with stakeholders	122
38	Academic/ Scientific & Technical Organization	123
39	Media Management	123
40	Recovery measures	124
41	Immediate and Short Term Recovery Details damage and	125

	loss assessment		
42	Restoration of Basic Infrastructure	125	
43	Long term Recovery	128	
44	Reconstruction and repair	128	
45	Restoration of Essential Services and Infrastructure	130	
	Annexure-1		
	District Profile	140	
	District Population Figure	142	
	Annexure-2		
	District History of Disaster	145	
	Annexure-3		
	Dam Water Release Management	147	
	Annexure-4		
	Details of Equipments available in the District	155	
	Annexure-5		
	Aapda Mitra and Swimmers List	162	
	Annexure-6		
	List of Charitable Institute in Mahisagar	166	
	Annexure-7		
	List of Equipment possessed by NDRF	167	
	Annexure-8		
	District Contact Number	169	

Annexure-9	
District and Taluka Map	198

ABBREVIATIONS/ACRONYMS

AAI	Air port Authority of India		
ACWCs	Area Cyclone Warning Centres		
AERB	Atomic Energy Regulatory Board		
BARC	Bhabha Atomic Research Centre		
BIS	Bureauof Indian Standard		
BISAG	Bhaskaracharya Institute for Space Applications and Geo-Informatics		
BOOT	Build Own Operate and Transfer		
BPL	Below Poverty Line		
CBOs	Community Based Organizations		
CBRN	Chemical,Biological,Radiologicaland Nuclear		
CCG	Central Crisis Management Group		
CDMA	Code Division Multiple Access		
CDO	Central Design Organization		
CEO	Chief Executive Officer		
CFO	Chief Fire Officer		
CMG	Crisis Management Group		
СоН	Commissioner of Health		
COR	Commissioner of Relief		
СР	Commissioner of Police		
CWC	Central Water Commission		
CWCs	Cyclone Warning Centers		
CWDS	Cyclone Warning Dissemination System		
DAE	Department of Atomic Energy		
DCG	District Crisis Management Group		
DDO	District Development Officer		
DEOCs	District Emergency Operation Centres		
DG	Director General		
DGHS	Directorate General of the Health Services		
DGP	Director General of Police		
DIG	Deputy Inspector General		
DSO	District Supply Officer		
DSP	District Superintendent of Police		
DISH	Director Industrial Safety& Health		
DM	Disaster Management		

DoR	Director of Relief		
	Director of Rener Directorate of Purchase and Stores		
DP&S DPR	Detailed Project Report		
DIR	Disaster Risk Management		
	Disaster Risk Management Programme		
DRMP			
EFC	Expenditure Finance Committee		
EMS	Emergency Medical Services		
EOC	Emergency Operation Centre		
ERCs	Emergency Response Centres		
ERTs	Emergency Response Teams		
ERU	Emergency Response Unit		
F&ES	Fireand Emergency Services		
GAD	General Administration Department		
GEB	Gujarat Electricity Board		
GERI	Gujarat Engineering ResearchInstitute		
GIDC	Gujarat Industrial Development Corporation		
GIDM	Gujarat Institute of Disaster Management		
GIS	Geographic Information System		
GMB	Gujarat Maritime Board		
GoG	Government of Gujarat		
GoI	Government of India		
GPCB	Gujarat Pollution Control Board		
GSDMA	Gujarat State Disaster Management Authority		
GSI	Geological Survey of India		
GSM	Global System for Mobile Communications		
GSWAN	Gujarat State Wide Area Network		
GUVNL	Gujarat UrjaVikas Nigam Limited		
GWSSB	Gujarat Water Supply& Sewageboard		
HF/VHF	High Frequency/Very High Frequency		
HoD	Head of Department		
HRVA	Hazard, Riskand Vulnerability Assessment		
HWB	Heavy Water Board		
IDRN	India Disaster Resource Network		
IEC	Information Education Communication		
IMD	Indian Meteorology Department		
INCOIS	Indian National Centre for Ocean Information Services		
INSAT	Indian National Satellite System		

IRIS	In corporate Research Institute for Seismology			
ISR	Institute of Seismological Research			
ISRO	Indian Space Research Organisation			
ICT	Information and Communication Technology			
ICTS	Information Communications Technology System			
KAPS	Kakrapar Atomic Power Station			
LCG	Local Crisis Management Group			
МАН	Major Accident Hazard			
MFRs	Medical First Responders			
MHA	Ministry of Home Affairs			
MoA	Ministry of Agriculture			
MoC&F	Ministry of Chemicals and Fertilizers			
MoC& I	Ministry of Commerce and Industry			
MoD	Ministry of Defence			
MoEF	Ministry of Environment & Forests			
MoF	Ministry of Finance			
MoLE	Ministry of Labour and Employment			
MoP&NG	Ministry of Petroleum and Natural Gas			
MSDS	Material Safety Data Sheet			
MoSRT&H	Ministry of Shipping, Road Transport and Highways			
NCC	National Cadet Corps			
NCMC	National Crisis Management Committee			
NDRF	National Disaster Response Force			
NEC	National Executive Committee			
NEIC	National Earthquake Information Centre			
NGO	Non Government Or ganization			
NGRI	National Geophysical ResearchInstitute			
NIDM	Nationalinstitute of Disaster Management			
NIOT	National Instituteo fO cean Technology			
NPCIL	Nuclear Power CorporationofIndia Ltd.			
NSRA	Nevada Seismic Research Affiliates			
NWRWS	Narmada Water Resources WaterSupply			
PESO	Petroleumand Explosive Safety Organization			
РРЕ	Personal Protective Equipments			
PFZ	Potential Fishing Zones			
PGA	Peak Ground Acceleration			
РМО	Prime Minister 'sOffice			

PMS	Probable Maximum Surge		
PPP	Public Private Partnership		
PS	Principal Secretary		
QCI	Quality Council of India		
QRMT	Quick Reaction Medical Team		
R &BDept.	Roads& buildings Department		
R &R	Rehabilitation & Reconstruction		
RDD	Radiological Dispersal Device		
RED	Radiation Exposure Device		
RESECO	Remote Sensingand Communication Centre		
RSO	Radiological Safety Officer		
SAR	SearchandRescue		
SCG	State Crisis Management Group		
SCMC	State Crisis Management Committee		
SDMA	State Disaster Management Authority		
SDMP	State Disaster Management Plan		
SDRF	State Disaster Response Force		
SDRN	State Disaster Resource Network		
SED	Site Emergency Director		
SEOC	State Emergency Operation Centre		
SMS	Short Messaging Service		
SOG	Standard Operations Guide		
SOP	Standard Operating Procedure		
SRPF	State Reserve Police Force		
SSNNL	Sardar Sarovar Narmada Nigam Limited		
SST	Sea Surface Temperature		
SWP	Single Wire Protocol		
TEOCs	Taluka Emergency Operation Centers		
UD&UHD	Urban Development & Urban Housing Development		
UNDP	United Nations Development Programme		
UTs	UnionTerritories		
WALMI	Waterand Land Management Institute		
WAN	Wide Area Network		

CHAPTER-1 INTRODUCTION

The state of Gujarat has been facing many types of calamities for the past few years. In which the Earthquake of 2001, the Cyclone of 1998 and the Flood of 1978 were important disasters. After the terrible earthquake of 2001, the Gujarat government has set up an organization for successful disaster management in the state. Which is known as Gujarat State Disaster Management Authority (GSDMA).

During the last ten years, there has been a process of preparing, implementing and updating the disaster management plan from time to time. The purpose of Gujarat State Disaster Management Authority is to involve in planning, risk and vulnerability assessment, development of response and mitigation measures and increase participation of local self-government bodies. There is a need to start the process of disaster management planning from the village level and subsequently to taluka and district level. This initiative to improve the disaster management plan at the district level can further align the plans at all three levels with necessary changes in the village and taluk level plans. It is also thought to prepare the Taluka level disaster management plan in such a way that the details of the village level plan can be integrated at the Taluka level.

Disaster can strike at any time. It can be on a small scale or on a large scale. At this time, preparation and planning is required to minimize the loss of life and property. It is not that natural disasters are something new or unknown to us. is Even in these earlier times, we have faced disasters with more or less success. But if we look at history, from the destruction of entire civilizations in the past, the human race has survived many such disasters. Natural disasters can never be completely avoided, but the impact and loss can be mitigated.

The present <u>"District Disaster Management Plan-2024</u>" has been prepared with reference to Gujrat State Disaster Management Act-2003, and Disaster Management Act-2005 and guiding principles of cooperation policy

NEED FOR THE PLAN

As per Section 15 (3) of The Gujarat State Disaster Management Act, 2003, "The Authority shall prepare, or cause to be prepared and maintain a master plan for the State". Section 23 (1) of The Disaster Management Act, 2005 also reads "There shall be a plan for disaster management for every State to be called State Disaster Management Plan". Apart from these statutory requirements, the hazard profile and disaster history of the state demands for a

comprehensive state disaster management plan to be in place for coordinated and streamlined management of disaster in the state.

Disaster Risk Reduction Post-2015

Post 2015, there has been a significant shift from the approach of Managing Disasters to Managing Risk. The three landmark global agreements viz. – the Sendai Framework for Disaster Risk Reduction 2015-30 (SFDRR), Sustainable Development Goals (SDG) and the Paris Agreement (CoP 21) set the stage for future global action on Disaster Risk Reduction (DRR), sustainable development and climate change.

SENDAI FRAMEWORK OF ACTIONS FOR DISASTER RISK REDUCTION 2015-2030

The Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR) was adopted at the Third United Nations World Conference on Disaster Risk Reduction held in Sendai, Japan in March 2015. The SFDRR is document which outlines four priorities for action to achieve 7 targets, which in turn would lead to one outcome that is- substantial reduction of disaster risk and losses in lives, livelihoods, health, economy of persons, businesses, communities and countries. India is a signatory to the Sendai Framework for a 15-year, voluntary, non-binding agreement which recognizes that theState has the primary role to reduce disaster risk, but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders.

THE FOUR PRIORITIES OF ACTIONS ARE:

- 1. Understanding Disaster Risk
- 2. Strengthening Disaster Risk Governance to Manage Disaster Risk
- 3. Investing in Disaster Risk Reduction for Resilience
- 4. Enhancing Disaster Preparedness for Effective Response and to 'Build Back Better' in Recovery, Rehabilitation and Reconstruction

THE SEVEN GLOBAL TARGETS ARE:

- A. Substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rate in the decade 2020-2030 compared to the period 2005-2015
- B. Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 in the decade 2020-2030 compared to the period 2005-2015
- C. Reduce direct disaster economic loss in relation to global gross domestic product (GDP)

by2030

- D. Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing theirresilience by 2030
- E. Substantially increase the number of countries with national and local disaster risk reductionstrategies by 2020
- F. Substantially enhance international cooperation to developing countries through adequateand sustainable support to complement their national actions for implementation of this Framework by 2030
- G. Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030

SUSTAINABLE DEVELOPMENTAL GOALS

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all United Nations Member States in September 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. The 17 SDGs are integrated-that is, they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health andeducation, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests. In order to make the 2030 Agenda a reality, broad ownership of the SDGs must translate into a strong commitment by all stakeholders to implement theglobal goals.

PARIS AGREEMENT ON CLIMATE CHANGE ACTION AND DISASTER RISK REDUCTION (COP 21)

The CoP 21or the Paris Climate Conference held in December, 2015 led to a new international climate agreement, applicable to all countries, aiming at "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre -industrial levels, recognizing that this would significantly reduce the risks and impacts of climatechange". The Paris Agreement recognized the need loss and damage associated with the effects of climate change. The agreement identifiedareas of cooperation central to DRR and called for investments to address the underlyingrisk drivers associated with rising greenhouse gas (GHG) emission levels and to

inspire innovationand low-carbon growth.

Prime Minister's 10 Point Agenda towards Disaster Risk Reduction

The Prime Minister, Shri Narendra Modi, listed a Ten -Point Agenda in his inaugural speech at the Asian Ministerial Conference on Disaster Risk Reduction 2016, held in New Delhi in November 2016 (AMCDRR), which has also been incorporated in the SDMP. The ten key elements consist of thefollowing:

- 1. All development sectors to imbibe principles of Disaster Risk Management
- 2. Work towards risk coverage for all-starting from poor households to small and mediumenterprises to multi-national corporations to nation states.
- 3. Encourage greater involvement and leadership of women in disaster risk management
- 4. Invest in risk mapping globally related to hazards such as earthquakes based on widelyaccepted standards and parameters.
- 5. Leverage technology to enhance the efficiency of disaster risk management efforts.
- 6. Develop a network of universities to work on disaster issues.
- 7. Utilise the opportunities provided by social media and mobile technologies.
- 8. Build on local capacity and initiative. Response agencies need to interact with the communities and make them familiar with the essential drill of disaster response.
- 9. Ensuring that disaster learning is well documented.
- **10.** Bring about greater cohesion in international response to disasters.

VISION

Making disaster resilient Gujarat by enhancing the capacity of all stakeholders to respond to disasters in a planned way to minimize loss of lives, livelihoods and economic loss in different forms including critical infrastructure, basic services including health and educational facilities along with social, cultural & environmental loss.

OBJECTIVES OF THE PLAN

- i) To assess various hazard, vulnerability, capacity and risk associated with the state.
- ii) To lay down various measures and guidelines for prevention and mitigation.
- iii) To lay down preparedness measures for all stakeholders.
- iv) To build the capacity of all stakeholders in the state to cope with the disasters and promotecommunity based disaster management.

- v) To provide clarity on roles and responsibilities for all stakeholders concerned with various phases of disaster management.
- vi) To ensure co-ordination and promote productive partnership with all other agencies related to disaster management.
- vii) To mainstream disaster management concerns into the developmental planning process.
- viii) Ensuring DRM is socially inclusive, gender sensitive and empowering.
- ix) Strengthen efforts to mainstream DRR into water management and reduce the likely impacts of water-related hazards.
- x) To develop efficient, streamlined and rapid disaster response and relief mechanism in thestate.
- xi) Prevent disasters and achieve substantial reduction of disaster risk and losses in lives, livelihoods, health, and assets (economic, physical, social, cultural and environmental).
- xii) Invest in disaster risk reduction for resilience through structural, non-structural and financial measures, as well as comprehensive capacity development.
- xiii) To commence recovery programme as an opportunity to build back better in case of a future disaster by incorporating community in the programme.
- xiv) Promote the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures to prevent and reduce hazard exposure and vulnerabilities to disaster.
- xv) Strengthen disaster risk modeling, assessment, mapping, monitoring and multihazard early warning systems.

Effective use of science, technology and traditional knowledge in all aspects of DRM.

PLAN ACTIVATION

The disaster response structure will be activated on the receipt of disaster warning/on the occurrence of the disaster. The occurrence of disaster may be reported by the concern monitoring authority to the Commissioner of Relief/GSDMA by the fastest means. The Commissioner of Relief (COR) will activate all departments for emergency response including the State EOC, District EOCs and Regional ERCs. Also, they will issue instructions to include the following details:

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

The State EOC, ERCs and other control rooms at the State level as well as district control rooms should be activated with full strength. The State Government may publish a notification in the official gazette declaring such areas to be disaster-affected area under GSDMA Act (Section 32 (2) (a)). Once the situation is totally controlled and normalcy is restored, the COR declares End of Emergency Response and issues instructions to withdraw the staff deployed in emergency duties.

PLAN IMPLEMENTATION

Both the DM Act 2005 and GSDM Act 2003 enjoins state governments to make provisions for the implementation of the disaster management plans. The Section 15 of GSDM Act 2003 states that every Department of the Government of Gujarat shall make provisions, in its annual budget, for funds for the purposes of carrying out the activities and programmes set out in its disaster management plan. The Act also mandates that every Department of the Government must prepare a departmental Disaster Management Plan in accordance with the SDMP.

AIMS AND OBJECTIVES

Mahisagar District is prone to multiple hazards such as Floods, Heavy Rain, Lightening, Earthquake, Fires and have experienced & witnessed too on several occasions in the past. Mahisagar district have experienced the effects of flood in past few years, effects of devastating earthquake of year 2001 & faced the impact of drought and water scarcity in summer. hence there is a need to have such disaster management plan which may be useful to comply with multi hazard approach to dealt with different disasters.

Recognizing the fact that most tasks and actions before and following a disaster are commonat the district level, the Mahisagar district administration has used a multi-disaster approach (all disasters covered by one plan) while developing disaster management plan for the district. The present plan is not intended to provide comprehensive explanations and background information about a disaster, or serve as a training manual on how to respond to a disaster or conduct a disaster related task. This is simply a Multi Hazard Management Plan consisting details regarding different hazards that affect the district along with the response structure to deal with such hazards, and having linkages of subsidiary DM plans of all levels and of sectors with this Plan.

FOLLOWING ARE THE MAIN OBJECTIVES OF THIS PLAN:

To protect and minimize the loss of human lives from the effects of different disasters

To promote a culture of prevention and reparedness by ensuring that disaster management receives the highest priority at all levels.

To ensure hat community is the most important stakeholder rin the disaster management process

To minimize the sufferings of the people arising due to different disasters.

To main stream disaster management concerns into the developmental planning process

To minimize the damages and losses that occur to the Property and Infrastructure due to different disasters. To reduce the vulnerability aspect of both the people and infrastructure due to different disasters

- To ensure the efficient response and relief with acaring approach towards the needs of the vulnerable actions of the society.
- **4** To create awareness and prepared ness by providing advice and training to the agencies involved in disastermanagement and to the community.
- **4** To assess the risks and vulnerabilities associated with various disasters.

To provide clarity on roles and responsibilities for all the stakeholders concerned with disaster management so that disasters can be managed more effectively and efficiently.

- **4** To strengthen the capacities of the community and to establish and maintain the effective Disasters Response Systems / Mechanisms.
- 📕 To strengthen the existing Response mechanism
- **4** To incorporate all the concerned aspects of DM for pre, during and post disaster phenomena.

To integrate and link up all level specific and department specific Disaster Management Plans

Mandatory Provisions of Disaster Management Plan

Preparation of Disaster Management Plan is one of the mandatory provisions under the Gujarat State Disaster Management Act-2003 and the National Disaster Management Act-2005.With respect to the above mentioned provisions; Gujarat State Disaster Management Authority and Relief Commissioner have issued guidelines for the preparation of District Disaster Management Plan.

The DM Act authorizes the District Collector to secure cooperation and assistance from other parties in efforts to avoid or reduce the impact of disasters. The Collector (Specifically) and Government authorities(generally) are responsible for managing hazards and disasters which affect a district, with support from GSDMA, the relief commissioner and other public and privateparties as may be needed. The roles, responsibilities and obligations of the Collector and other parties are set out in detail in theAct and are considered as part of this plan.

Concept of Disaster Management

There are few terms and definitions of Disaster and Disaster Management as per DM Act -2003, the basics of Disasterand Disaster Management can be understood as follows:

- The term Hazard means: A hazard is a natural or manmade phenomenon which may causes physical damage, loss or threaten human life and wellbeing if it occurs in an area of human settlement, agricultural of industrial activity
- Category of Hazard :
- 1. Natural hazards are the hazards that are caused because of natural phenomena (hazards with meteorological, geological or even biological origin). Examples of natural hazards arecyclones, tsunamis, earthquake andvolcanic eruption which are exclusively of

naturalorigin. Landslides, floods, drought, fires are socio-natural hazards since their causes areboth natural and manmade. For example, flooding may be caused because of heavy rains, landslide or blocking of drains with human waste.

2. Manmade hazards are the hazards that are caused due to human negligence. Manmade hazards are associated with industries or energy generation facilities and include explosions, leakage of toxic waste, pollution, damfailure, wars or civil strifeetc.

Geological Hazards

- Earthquake
- Tsunamis
- Volcaniceruptions
- Landslides
- 3. Climatic Hazards
- Storms (including tropical cyclones)
- Floods
- Drought
- Tornados
- 4. Environmental Hazards
- Environmental pollution
- Deforestation
- Desertification
- Pestinfestation
- 5. Industrial accidents
- Nuclear
- Biological
- Chemical

6. Epidemics of all types

• The term Risk means: Risk is defined as the expected losses (lives lost, persons injured, damage toproperty, economic activities of livelihoods disrupted) to accommunity when a hazard event occurs. The probability of the loss will occur as the result of an adverse event, given the hazard and vulnerability.

• The term Vulnerability means: Vulnerability is define dasthe degree of loss it

issets of prevailing conditions, which adversely affect peoples ability, prevent, to prepare for and respond to hazards event. These long term factors, weaknesses or constraints affect a house hold dor communitys ability toabsurd lossesa fter disaster or torecover from the damage.

Definitions as per the Disaster Management Act-2003

Disaster means an actual or imminent event, whether natural or other occurringin any part of the District which causes, or threatens to causeall or any of the following:

- (i) Wide spread loss or damage to property, both immovable and movable; or
- (ii) Wide spread loss of human life or injury or illness to human beings; or
- (iii) Damage or degradation of environment; and any of the effects specified in sub -clauses (i) to (iii) is such as to be beyond the capacity of the effected community to cope up with using its own resources and which disrupts the normal functioning of the community;

Disaster Management is a continuous and integrated process of:

- Planning and implementing measures to mitigating or reducing the risk of disasters
- Mitigating the severity or consequence of disaster
- Preparedness for emergencies and disasters
- Assessing the effects of disasters
- Providing emergency relief and rescue and post disaster rehabilitation and reconstruction, and Building capacities to these ends.

DISASTER MANAGEMENT PROCESS

The concepts of all hazard management and empowerment provide the foundation for disaster management plans and efforts. All hazards management involves considering, planning for and taking actions to avoid or mitigate, all possible hazards, which mayaffect the district.

Empowerment means that each citizen is enabled through education, training and support, to be able to address all hazards and disasters, which may threaten their lives or livelihoods. Empowerment does not transfer full responsibility for dealing with disasters to the individual, but strives to ensure that each individual has the means and support needed to avoid or limit the impact of disaster.

The district and subsidiary plans seek to limit vulnerability and reinforce the resilience of communities in the face of hazards and disasters. Addressing vulnerability generally takes place before a disaster through actions to reduce the opportunities for the disasters to occur. Reinforcement of the resilience occurs through actions to reduce the scale or potential impact of a disaster, and building capacities and systems that facilitates (shorten and make less costly) the recovery process.

Approach to Disaster Management

The Government of Gujarat takes a comprehensive approach to disaster management. Disaster impact reduction is divided into two broad areas:

- <u>Warning, Relief and Recovery</u> focusing on plans and actions necessary to reduce the impact of quick-onset disasters or speed theresponse to slow-onset disaster, and,
- <u>Mitigation, Preparedness and Prevention</u> focusing on plans and actions to avoid or eliminate the causes or impacts of hazards or threatened disasters.

The over all approach to disaster management is based on six elements;

- Accurate risk and Vulnerability assessment.
- Planning and efficient allocation of resources
- Capacity building and training.
- Provision of adequate resources.
- The assignment of disaster management roles and responsibilities which correspond to normal roles and responsibilities (if possible) and,
- Use of diverse legal and operational mechanisms to accomplish disaster management objectives.

Policies and Responsibilities

The Institutional framework for operationalization of the DM planat the District level is conceived in terms of integration of both rural and urban areas and by recognizing the interdependence between line departments, district and state level authorities. The constitution of the District Disaster Management Committee will be as per the Gujarat Disaster Management Act 2003. Details with Functions of DDMC members of District

Authorities and Responsibilities

There quirement for district and subsidiary plans is set by the Gujarat State Disaster Management Authority (GSDMA) under the authority of the Gujarat State Disaster Management Act of 2003. The Act authorizes the collector to secure cooperation and assistance from other parties in efforts to avoid or reduce the impact of disasters.

The Collector (Specifically) and Government authorities (generally) are responsible for managing hazards and disasters that affect a district, with support from GSDMA, the Relief Commissioner and other public and private parties as may be needed. The roles, responsibilities and obligations of the Collector and other key parties are set out in detail in the Act and are considered as part of this plan.

Warning, Relief and Recovery

Warning, Relief and Recovery actions are intended to eliminate the loss of life and property andreduce hardship as a result of disasters. Plans and SOPs at District level should provide aseamless mechanism of warning, relief and recovery assistance to avoid or reduce losses and hardship.

The focal point for early warning, relief and recovery is the District Collector, who directs and coordinates these efforts within the district. The Collector is also responsible for coordinating. Warning, relief and recovery with similar activities in neighboring districts and with the GSDMA and Revenue Department.

The Collector is further responsible for developing long term relief, recovery and rehabilitation plans during the course of a disaster. These plans will include steps to reduce disaster impact in the future and be coordinated with the GSDMA in terms of policy and implementation.

Mitigation, Preparedness and Prevention

Mitigation, preparedness and prevention actions are to be taken before a disaster to reduce the likelihood of a disaster (risk reduction) or the level of damage (vulnerability reduction) expected from a possible disaster. Vulnerability reduction is given priority over risk reduction. The district can avail itself of any or all of four mechanisms to reduce risk and vulnerability:

- Long term planning for mitigation, preparedness and prevention-investments to this effect in the district,
- Enforcement of regulations, particularly building and safety codes and landuse plans;
- Review and evaluation of development plans and activities to identify way store duce risks and vulnerability; and
- Capacity building, including warning, the provision of relief and recovery assistance and community-level identification of riskand vulnerability.

The Collector, assisted by the District Development Officer, is responsible for developing plans and activities to effect mitigation, preparedness and prevention using the mechanism noted above. Based on the interim assessment of risk and vulnerabilities, the District will focus on the following areas for mitigation, preparedness and prevention, which are specific to district:

- Resilience of life line systems (water, power, roads and communications)
- Reduction in disaster impact on health care facilities and schools
- Vulnerability reduction in flood-prone areas, includeing river bank erosion
- Vulnerability reduction to high winds
- Improvement of Off-site Preparedness near Industrial sites.

Plan Review and Updation

Disaster Management Plan is prepared and reviewed by the District Collector / DEOC in collaboration with the line departments and other organizations in the district.

The plan reviewed annually (in the Month of May) and inspecial case periodically too and updated:

- When significant changesi n the nature of any hazards
- Lessons learnt following any major disaster or
- When the reisany significant change to organization or responsibilities of primary members of the task forces defined in the plan.

Financial Arrangements

With respect to the Updation of the DM plan the expenditure shall be booked either from the

grant provisions of GSDMA under the DM Plan Updation head and time to time guide lines of GSDMA or as per the directions of District Collector the expenditure will be booked under the head of 2245 for DDMP Updation.

There are other provisions which are utilized in different kinds of relief measures as per the directions released from Central Government, State Government and so the Collector & DM viz.the funds like Calamity Relief Fund (CRF) which is utilized for the affected people / nature / cattle death in case of the natural calamities, NCCF, CM Relief Fund, PM Relief Fund etc.

Scope of the Plan

The District Disaster Management Plan for Mahisagar District has been prepared for its execution by various departments and agencies of the district and other Non- governmental Agencies expected to participate in disaster management process. This plan provides for Vulnerability Assessment and Risk Analysis, Preventive Measures, Mainstreaming disaster management concerns into Developmental Plans, Preparedness Measures, Response Mechanism, and Partnership with Stakeholders, Financial Arrangement, Roles and Responsibilities of the Various agencies interlinks in disaster management and the scope of the iractivities. An elaborative inventory of resources has also been formalized.

Trigger Mechanism

The plan would be put into action as per the levels of disasters categorized i.e. L0, L1, L2 & L3.

Levels of Disaster (The L Concept)

The L concept has been developed to define the different levels of disaster in order to facilitate the assistance to Stateand the Centre. It has four levels which are as follows.

- L0 level: Denotes normal times, which will be utilized for close monitoring, documentationand preparatory activities. Training of Search and Rescue teams, rehearsals, evaluation and inventory updation for response activities will becarried out duringthis period.
- L1 level: Denotes when the disasters which can be managed at the District level where the State and the Centre need to be on guard in case assistance is required for disaster relief operations.
- L2 level: Disaster situations that require assistance and active participation of State

resources for management of the disaster.

 L3 level: Disaster situation arises in case of large scale disasters that have a noticeable impact on a number of districts of states and when the State and District authorities have been over whelmed with the disaster and require assistance from the Centre for rescue and relief operations.

CHAPTER-2

HAZARD, RISK AND VULNERABILITY ASSESSMENT

The Hazard technically is not a disaster unless the 'Trigger ' set it off. It could be weak legislation that failed to regulate the functioning of the facility. The Risk and Vulnerability factors analyzed from these Hazards which vary from Minor to Major impacts affecting the smaller or larger areas of the District.

"Risk is a technical concept, which is used by engineering and management specialists to arrive at an estimation of losses in the event of disaster and the expected probability of its occurrence."

> Risk = <u>Hazards x Vulnerability</u> Coping Capacity

"Vulnerability gives the extent to which a community is affected by a disaster". The idea of danger or threat points out the possibility of physical event capable of causing damage, like earthquake, floods, industrial accidents etc. The vulnerability brings to light, the structural susceptibility of society or social group to suffer harm, based on physical event constituting a "Threat". Vulnerability concerns the relationship between the social, economic andphysical elements, on which the wellbeing of the society or the group in question depends. The analysis of vulnerability is specific and based on the type of danger or threat, which is apprehended.

The table below summarizes the results of ananalysis of impact of Hazard, riskand Vulnerability of disaster in Mahisagar is as below. This analysis indicates that disaster planning at district level should first focus on the functional response to the Flood, IndustrialAccidents and Earthquakes which triggers to the other hazards like Dam Failure, Water logging, Fire, Failure of critical infra structure and building collapse.

Table1: Risk and Vulnerability Analysis

Hazards	Probability	Impact	Vulnerability	Vulnerable
	Rating	Rating	Ranking	Areas/Talukas
Industrial	5	4	2 (Low)	Industrial areas of
Accidents				Balasinor Taluka.
A) Fire				
B) Leakageof	4	3	12 (moderate)	Mostly in urban
Gases		Ũ		pockets and
C) O'l S- 'll				industrial areas
C) Oil Spill				(including rural
				areas), and
				domestic fires in
				rural
				Areas.
Drought	4	3	12 (moderate)	Kadana, Khanpur
				and Santrampur
				Taluka
Flood	5	5	20 (High)	Mostly lowlying
				Areas
Epidemics	5	4	25 (High)	Whole District
HeatWave	4	3	12 (Moderate)	Whole District
Rail/Road/Air	4	2	10(Moderate)	Whole District
Accidents				
Earthquake	3	2	16 (High)	Zone-3
Terrorism	2	5	15 (moderate)	District
1) Cyber				
2)Robbery				

[
Boat Sinking	2	1	2 (Low)	Majorly the areas surrounded by rivers i.e. Lunawada, Kadana, Khanpur Taluka
Building Collapse	1	2	2 (Low)	Majorlythe Urban areas
Dam Failure	2	1	2(Low)	District has 2 (Kadana and Bhadar) major dams and 1(Panam Dam of Panchmahal District) medium / minor dams Dam can be the vulnerable.
Failure of Critical Infrastructure	2	1	2(Low)	-

Capacity Analysis

Traditional Coping Capacity:

It is important to identify and recognize traditional coping capacity of the

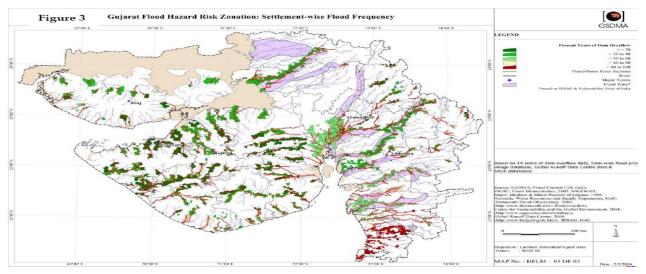
community to enable them to enhance their capacity to with stand disasters.

Hazard	Early Warning	Preparedness	Early Response
Flood	Monitering of water resoureces through community	Identification high elevation placesand Rescue teams	Evacution, Search and rescue and First aid support
Cyclone	Information through Fisher folks	Evacute to safe place	Search and rescue and First aid support

Earthquake		Identification of Safe	Search and rescue
		Places	and
			First aid support
Draught	Own	Fodder storage, Food	Panjrapol
	assessment	Storage at	
	mechanism	individual level	
Industrial/Chemical	Local Adinistration	OCR,DISH and EOC	Local Response
Hazard			Teams
Tsunami		Evacute to safe place	Search and rescue
			and
			First aid support

2.1 Hazard Assessment, Disaster History :-

2.2 Flood :--



This district consists of two major rivers namely Mahi river and Panam river. Kadana Dam situated on Mahi river and similarly Panam Dam on Panam River in Panchmahal District.

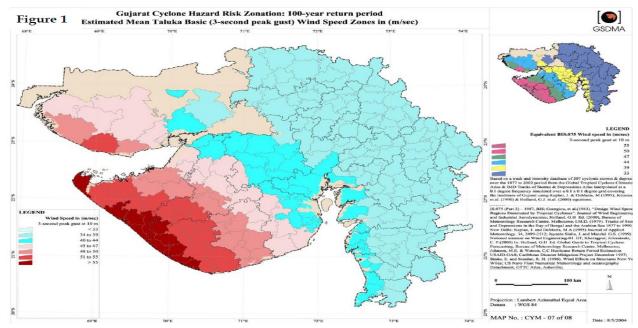
If there is more rain in the upper reaches of Rajasthan, then more water is released from the dam, or due to more rain, flooding may occur in the villages involved

Name of Flood affected Villages (Annexure-3 Page No-150.)

Potential Dangerous location	Place	Responsible section	Number of Affected villages	Affected Agriculture (.ha)a Are	Affected Population	Affected Animal
Various Dams	Kadana Dam Bhadar Dam Panam Dam	Irrigation Department	136	1200	100000	150000

2.3 Cyclone

There is a possibility of 50 to 70 hours of wind blowing in the atmosphere before and after monsoon in the villages of Mahisagar district. According to the disaster calendar, the months of May to November are for preparation against storms

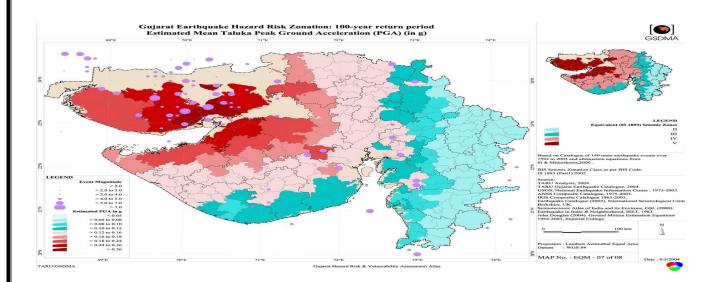


Damage to weak structures (especially weak and jointed roofs) is the cause of death after structural damage to property. Damage to residential structures results in loss of life. In the month of May-2021, there was a big loss in Mahisagar district in Taukte cyclone .

2.4 Earthquake:-

Earthquakes cannot be predicted, hence its severity and damage cannot be estimated, so

more care/vigilance is necessary in this regard. Mahisagar district is an earthquake zone-3 district.

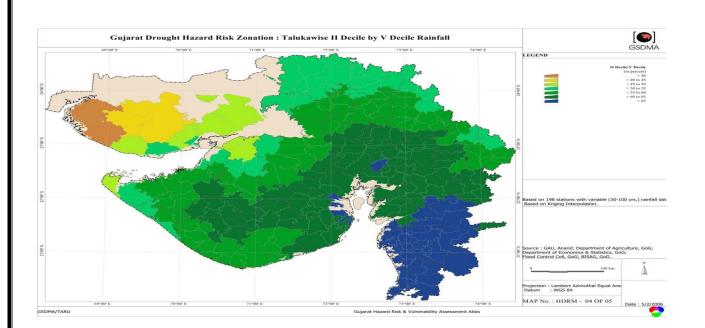


From the earthquake point of view, paved and multi-storied buildings exist in urban areas in the district. And in rural areas paved and multi-storied houses are few and especially cement, clay and The construction of crude wooden houses is widely seen. Thus with respect to earthquakes Urban areas appear to be more likely to be affected than rural areas. The effects of loss can be minimized if the community's public planning before, during and after earthquakes is done with retrofitting earthquake-resilient construction technology.

2.5 Draught

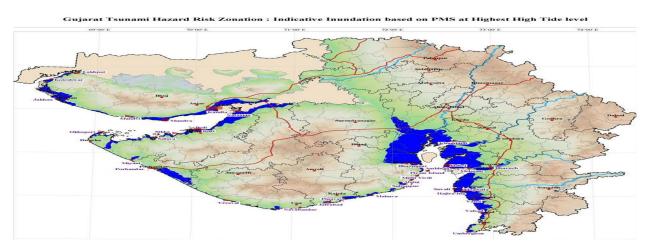
In Mahisagar district on an average for one year in three to five years Santrampur, Kadana, Khanpur, Virpur And in the bordering talukas of Balasinore, deficient rainfall creates water scarcity.

Since the rainfall during the rainy season of 2015 is less, thus, the total rainfall in the taluka is less as follows. There was a problem of water and fodder in the Santrampur, Kadana, Khanpur and Virpur talukas.



2.6 Tsunami:

Tsunami is an extraordinary natural phenomenon. Tsunamis are often called tidal waves. But actually tsunamis have nothing to do with global mass tides.



A tsunami is actually a series of waves traveling in the open ocean at an average speed of 450 (and 600) miles per hour. Tsunamis are mostly generated by undersea earthquakes. An earthquake with a magnitude (intensity) greater than 6.5 is considered critical for generating a tsunami.

Analysis of Sources:

Different types of rescuers are needed to respond during different disasters in the district. The details of availability of advanced and competent personnel during calamities like earthquake, fire, flood, accident, etc. are included from Annexure-4 (Page No.-158).

6. Capacity Analysis :-

List of Abilities Against Floods, Storms :

Order	details	the number
1	Villages at Risk (Annexure-3 , Page No150)	136
2	Government fodder supplier	00
3	Grain Quantity (Cheap Grain Store)	323
4	Machine Boat	02
5	A simple boat	00
6	Boat operator	06
7	Life jacket	119
8	Life Ring	104

List of capabilities against earthquakes

Order	details	the number
1	Earthquake prone village	0
2	Food supplier cheap grain store	323
3	Dumper	44
4	Health Sub Center	224
5	Primary Health Centre	35
6	Community Health Centre	08
7	Sub District Hospital	01
8	District Civil Hospital	01
9	Private Hospital	13
10	Private Laboratory	22
11	Post Mortm Unit	25

In the above assessment, it is seen that the efforts of capacity development through skilled manpower, machinery and resources at taluka place for conventional hazards like flood, cyclone and earthquake are in progress.

CHAPTER-3

PREVENTION, MITIGATION AND PREPAREDNESS

In the context of Mahisagar district in particular and Gujarat State in general the Disaster Management perspective has been followed in three phases, i.e. pre, during and post disaster management activities.

The pre-disaster phase includes prevention, mitigation, and preparedness activities. These activities involve Extensive Data collection, maintaining Directories of resources, developing Action plans, Capacity building, Training and Community awareness activities among others. District administration, other Government departments, local authorities and other relevant agencies have already been formulated / working on the plans for prevention and mitigation of disasters and will build the capacity and ensure preparedness in the event of a disaster actually taking place. The private sector, NGOs and the community actively co-operate with the relevant agencies and participate in the training and other activities, which are conducted to augment their disaster management capabilities.

In this context, District Administration and different Government Line departments act as the nodal agency for mitigation, preparedness and capacity creation for the respective specific field areas as per the guidelines of State government and GSDMA.

In district, DEOC/District Administration has developed linkages with other stakeholders such as Lending agencies, Government departments, Local authorities, NGOs, Private sector and Community groups in order to share the knowledge and augment capacity on a holistic basis. capabilities developed in this phase playa critical role in all subsequent phases.

In Pre-Disaster Phase with Respect to district, the key activities may be the joint efforts from the Chairman i. e. District Collector and other district line department heads /District Disaster Management Committee members to wards the disaster management.

Planned Development:

There is a significant relationship in the way disasters and development affect each other. A longterm disaster management approach has been adopted and accordingly planning activities for development has been carried out for robust mitigation practices. District Administration and different Government Departments would ensure that the planning activities of the district administration and local authorities would take into account disaster risks and provide for suitable preventive and mitigation measures.

Development of policies, SOP's and guidelines:

Effective disaster management requires the formulation of clear guidelines and subsequent compliance by all Government authorities, private sector entities and the public at large. Different departmental SOP's has been developed for district and department specific and private sector specific SOP can be developed intheseregard.

Establishment of a proper chain of command: It is imperative that a clear chain of command is established for effective management of activities that immediately follow a disaster. DEOC/District has been established a clear chain of command which is headed by District Collectorand DEOC is the focal control room for all disaster management activities and coordination mechanisms across all entities responsible for implementation in the district.

Risk Assessment:

Before commencing preventive and preparedness activities, it is important toidentify and assess different types of risks for the district. Relevant departments will co-ordinate with District Administration for athorough assessment of:

- Hazards: Classification of the region in to zones, based on hazard potential; and
- Vulnerability: Assessment of degree of vulnerability of any given structure/ people / region to the impact of thehazard.

The assessment has been used for developing detailed conting encyplans and mitigation measures.

Develop Disaster Management Plans:

Detailed Disaster management plans that are tailored to local needs would enable the relevant authorities and the community to respond systematically and effectively to disasters. District administration / DEOC, different line departments, and expert agencies etc., in consultation with DEOC has developed the disaster management plans. These are constantly reviewed and updated.

Develop Repositories of Information:

It is critical that the relevant authorities should be in aposition to quickly establish contact with people and resources in the aftermath of a disaster. DEOC and the relevant Government departments has created comprehensive repository of information such as names, contact details, and made easily accessible to the relevant authorities at all times.

Establish Communication Networks:

A robust district-wide communication network is critical not only form anaging disasters butals of or effective functioning of the district administration. Comprehensive communication network has been established up to village level by DEOC and differentline department.

Developing Early Warning Mechanisms:

Early warning mechanisms help the relevant authorities in taking timely preventive measures and thereby, reduce the damage caused by disasters. Set up of early warning mechanisms by DEOC, different control rooms and departments to give advance warning for hazards like cyclones, floods etc.

Building Capabilities & Expertise:

It is necessary to build strong capabilities and expertise for handling various aspect of disasters. District administration with the support of GSDMA has been involved in enhancing the capabilities of different officials and community members, NGO's etc. by imparting disaster management trainings to different agencies and departments by providing rescue equipments for strengthening individual and department with respect to disaster management.

During the period of any kind of Disaster:

As per the set response mechanism with this District Disaster Management Plan all line department

will perform accordingly to get the routine life back on the regular track, District Collector is the Responsible Officer and as per his/her directions all other line departments, agencies respond to the disaster and ensure that the damage due to the disaster can be minimize as much as possible. The Rescue and Relief work in the affected area will be the focal point of response and accordingly the response teams / groups will be performed to let the disturbed life on track.

In Post disaster scenario of any types of disaster, the focus will be on the rehabilitation and reconstruction work, as per the directions of State Government and so the Chair person & District Collector, the afore said task will be performed with the support of different taskforce, department and agencies and by the cumulative efforts of all line department and response groups the focus will be on the routine life establishment.

Mitigation, preparedness and prevention actions are to be taken before a disaster to reduce the likelihood of a disaster (risk reduction) or the level of damage (vulnerability reduction) expected from a possible disaster. Vulnerability reduction is given priority over a risk reduction.

As District is surrounded by various rivers and industrial zones the major possibilities of floods and industrial hazards are more with the district so the required mitigation strategies may be developed in this regards to minimize the effect of such kind of disaster. Following flow chart shows the Disaster Management and Mitigation as pects in three different DM phases.

-Mitigation means measures aimed at reducing the impact or effects of a disaster;

Prevention means measures the object of which is to avoid the occurrence of adisaster

Reconstruction meansre pair and construction of a property under taken after a disaster

• Rehabilitation means any activity the objects of which is to restore normalcy in conditions caused by a disaster;

• Emergency Preparedness means the state of readiness which enables stakeholders to mobilize, organize and provide relief to deal with and impending or actual disaster or the effects of a disaster;

1. Level specific Disaster Management plans such as District DM Plan, Departmental DM Plan, Offsite emergency Plan, Taluka DM Plan, Village DM Plan, City DM Plan, etc. have been prepared and up dated periodically, time to time instructions for development and Updation of DM Plan for different set up like industries, Educational establishments, Health infrastructure, different agencies have been given by the District EOC.

2. Preparation and timely Updation of district level contact detail diary, Resource Inventory and communication plan by District EOC.

3. The database of DM Plans has been updated on regular basis on SDRN and IDRN.

4. Capacity building of all stakeholders including government officials, agency representatives, PRI's and community members with respect to Disaster Management, It is on going process.

5. Subject specific trainings such as First Aid, Search & Rescue, EOC Management, Early Warning & Communication and Masons training has been organized for various stakeholders by inviting guest lecturers, Professional trainers of different health agencies, firedepartment, individual agencies to conduct the trainings for different types of stakeholders of all level.

6. Awareness generation programmes with respect to Disaster Management are frequently organized to sensitize all kinds of stakeholders, officials, community members of all level and other organizational representatives on Disaster Management through various types of modes such as:

• Orientation/sensitization meetings

• Competitions

• School level programmes (elocution, Poster competition, etc.)

• Rallies

• Using special drives of IEC hand outs distribution for different Agencies / bodies /practitioners

• Poster exhibition and IEC distribution on different occasions /fairs /in National / local festivals, in government programme.

• Video Screening for different target groups.

• By organizing different programmes like street plays, Bhavai etc.

• Spread the message of preparedness and what to do and what not at the time of emergencies through media channels, Print media (local and national both), cell phone operators by scrolling of messages and warnings.

7. Training and Rehearsals at all levels (District, Taluka, Village, City)

For effective implementation of this DDMP, regular training and mock drills involving all key members need to be carried out. This will further enhance better understanding of individual's role

and responsibilities in emergency response besides improving the over all coordinated efforts. The main objectives of training planare:

• Familiarizing key personnel involved in the plan with their equipment, the over all plans and their roles.

- Ensuring efficacy of emergency response mechanisms / resources.
- Reviewing the total plan, so that updating, modifying and training activities can be improved.

8. Mock Drills

The ability of the Emergency Management Team is to perform a set of critical tasks under simulated conditions for different hazards that are validated by conducting a full scale mock drill once in a year at district level. This includes but not limit to management initiatives, response activities, direction, control, mobilization of resources, communications, mitigation and post incident activities of all concerned. This is a field mockdrill on a large scale involving all the task forces.

After completion of every mock drill, a debriefing meeting shall be arranged in which proceedings of the mockdrills are discussed highlighting weakareas /short falls for effecting improvement in the plan.

Taluka level mockdrills have been organized twice in a year for checking of preparedness measures of all kinds of DM initiatives in particular DM Plan updation status. Same way as per the office order of zonal-subzonal officer's appointment, village level mock drills has to be performed thrice for one taluka covering different villages of the taluka.

Electronic Support for resources utilization and information

1. State Disaster Resource Network: (SDRN)

SDRN is Web base data base system/portal and can be utilized for the DM related resource details/ information of Taluka, City and Village of whole district. SDRN consist contacts related as well as resources related both types of details of the Gujarat State. This portal can be utilized from Taluka, District and from state level. It runs GSWAN and Private connectivity. For utilization of the same one can use the following link:

http://sdrn.gsdma.org

2. India Disaster Resource Network:(IDRN)

IDRN is nation wide data base portal and utilized through district and from state and national level. IDRN consist online data base of equipments, skilled men power and critical supplies of whole nation. This data base can be utilized at the time of crisis; For utilization of the same one can use the following link:

http://www.idrn.gov.in

MITIGATION MEASURES:

• Structural Mitigation Measures for Flood (Identified works of concerned Departments are indicative):

Probable Mitigation Measures	Identified Locations and Villages	Implementing Departments	Convergence with Scheme/ Program	Time Fram e
Desilting and deepening of water channels (kaans)	Respective Sensitive Kaans	Irrigation,	Departmental program	Before June
Repair and maintenance of Flood Channels, canals, natural drainage,stormwater lines	-	Irrigationde partment	Departmental orspecialplan	Before June,
Construction of Safe Shelters (new construction through Indira Awas, Sardar Awas and Ambedkar Awas)	Respective villages	Rural Development	Housing Scheme	Regularly
Desilting of water bodies like river and ponds	Village ponds and river streams	Irrigation TDO Rural Development	Departmental program	Before June

Non-Structural Mitigation Measures for Flood:

Non- Structural	Locations/ coverage	Implementing Departments	Convergence with agency/ program	Time Frame
measures	Area			
Safety audit of	Flood risk	TDO, Rural	Sardar Awaas and	Regularly
existing and	prone	development	other rural housing	
proposed housing	villages		schemes	
stock in risk prone				
areas				
Promotion of	Flood risk prone	TDMC,	Training and	Continuous
Traditional, local		SHGs and youth groups,	capacity building	
and innovative		NGOs	plan for disaster	
practices like			management	
bamboo/ plastic				
bottle raftsetc				
Capacity	Flood risk prone	ТДМС	Training and	Continuous
building of			capacity building	
volunteers and			plan for disaster	
technicians			management	

• Structural Mitigation Measures for Earthquake:

Structural measures	Identified Locations and Villages	Implementing Departments	Convergence with Scheme/ Program	Time Frame
Retrofitting (if	Whole District	R&B (State and		Regularly
required)		Panchayat),		
of public utility		Panchayat, Rural		
buildings like		department		
offices,schools/banks				
markets etc.				

•

Retro fitting of	DDMC, DDO	Rural housing	Regularly
unsafe rural		schemes and	
houses		departmental	
		programs	
Identifying and	R&B department		Regularly
safely			
Dismantling unsafe			
structures			

• Non-Structural Mitigation Measures for Earthquake:

Non-Structural measures	Location/ coverage area	Implementing Departments	Convergence with agency/ program	Time Frame
Capacity building of architects, engineers and masonson earthquake Resistant features	Whole district	R & B (State and Panchayat), DDMC		Regularly
Registration of trained and certified mason		R & B (State and Panchayat), DDMC		Regularly
Strict enforcement of guideline per taining to seismic safety for government rural housing		DDO	Rural housing schemes	Regularly
Mock-drills for Schools, Hospitals and , Public Buildings and trainings for mason, engineers And architects		DDMC, Schools		Regularly

• Industrial (Chemical)Structural Measures (incoordination with LCG, DCG district and state level authorities)

Structural measures	Activities	Implementing Departments	Convergence with Agency /program	Time Frame
Monitoring impact of industries on NRM (land, water and air)	Data collection of impacton natural resources (ground water monitoring wells, air quality test,etc)	DDMC, TDMC, LCG, GPCB		Regular interval
Safety assessment	Carry out structural safety inspection/audit	DISH, DCG, LCG (Dy. Industrial safetyand health)		Regular interval

• Industrial(Chemical)Non-Structural Measures (incoordination with LCG,

DCG district and statelevel authorities)

Nonstructur al Measures	Activities	Implementing Departments	Converge nce Agencies	Time Frame
Planning	Prepare an onsite and offsite emergency plan	Occupier, DISH		Regular interval
	Conduct mockdrills as per the regulations	DCG,DISH and LCG		Regular interval
	Update the plan as per the requirement	Occupier,DISH		Regular interval
	Monitor similar activities in all the factories /industries	DISH and LCG		Regular interval
Capacity Building	Develop IEC material for Publication &	DDMC,TDMC		Yearly

	Distribution		
	Awareness generation	DDMC,TDMC,L	Regular interval
	to general public and	CG	
	medical professional		
	residing near MAH		
	factories for immediate		
	steps		
	Organize training	DDMC,	Regular interval
	programmes, seminars	TDMC,LCG	
	and workshops (e.g. line		
	departments officers,		
	Mamlatdar etc)		
	List of experts/	DDMC,TDMC,	Regular interval
	resource	LCG	
	person/subject		
	specialist (District		
	emergency Off site		
	plan)		
	Encourage	Labour&	Regular interval
	disaster	employmentde	
	insurance	partment	
Medical	Listing of	Occupier,	Regular interval
	hazardous	DCG,LCG,DISH,B	
	chemicals and	НО	
	gases.		
	Keep check on	Occupier,	Regular interval
	availability and validity	DCG,LCG,DISH,	
	of relevant antidotes for		
	chemical hazards		
	prevalent in District		

	Workshops and trainings for medical professionals to handle potential chemical an dindustrial hazard	DCG, Occupier, LCG,DISH	Regularly
Compliance	Environmental Protection Act, Factory Act, Mutual Aid SOPs	DISH,GPCB	Regular interval

At District level, the District Crisis Management Group (DCG) is an apex body to deal with major chemical accidents and to provide expert guidance for handling them.

<u>CHAPTER - 4</u> <u>RESPONSE PLANNING</u>

Trigger Mechanism for putting the plan in to action

The plan would be put into action as per the levels of disasters categorized i.e. L0, L1, L2& L3 (As mentioned earlier in the DM Concept - Chapter - 1). It could also be put into action on recommendations or directive of the State Crisis Management Group taking into consideration the situation prevailing at a given point of time. The District Disaster Response structure is activated on warning or occurrence of a disaster.

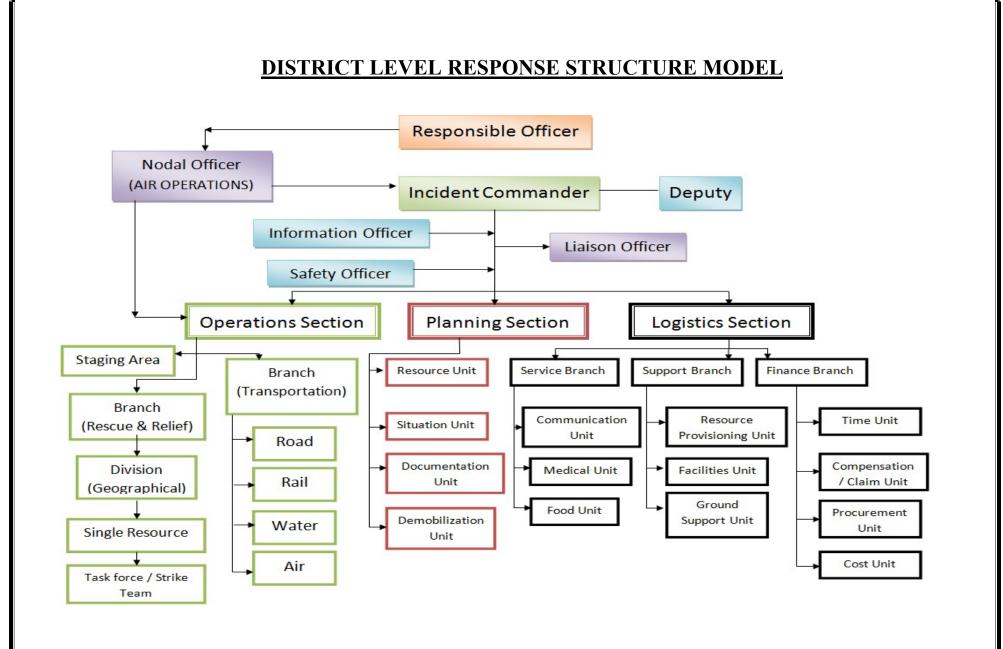
Special powers are conferred on Responsible Officer during disasters. Principle organization leading each task force is responsible for giving alert to the appropriate authority when use of the special powers is required to accomplish warning, relief or recovery objectives given to the task force.

Disaster Response and District Incident Response System

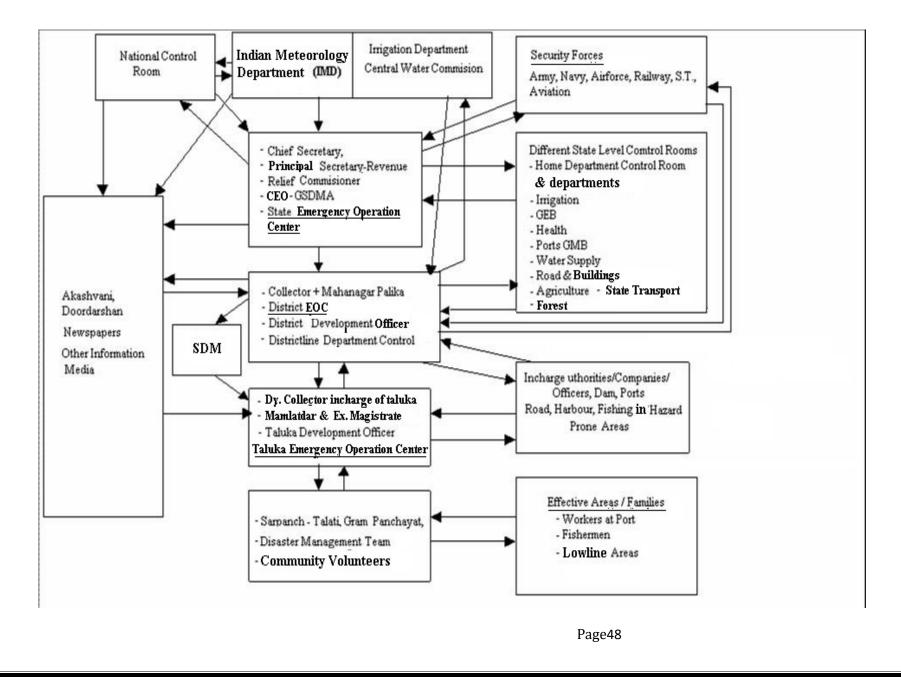
The response to disasters in the district will beorganized according to the Incident Response System as adapted to the conditions in Gujarat State (IRS/GS). The argument for the IRS is that its fundamental elements –predefined different task forces, identified resources, and predefined duties and responsibilities to different task forces will lead to an effective response to anykind of disaster.

In district, the District Disaster Management Plan is focused on sector specificaction plans unlike the department specific planning approach. The disaster response is led by the District Emergency Operation Center (DEOC) under the command and control of the District Collector.

Frame work for Talukalevel Disaster Management Committee, City level Disaster Management Committee and Villagelevel Disaster Management Committee has been made, updated and followed for different level specific Disaster Response Mechanism.



LINKAGES OF DISTRICT WITH STATEAND NATIONAL LEVEL



INCIDENT RESPONSES YSTEM

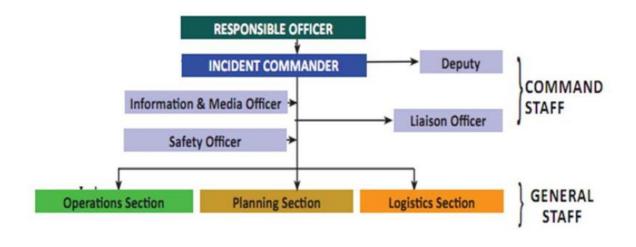
1. IRS Organizational Structure: IRT Frame work

As per NDMA's IRS guidelines, IRT at District, Sub-Division, Tehsil and Block level should be constituted under the written directives of District Magistrate (DM). These teams will include experienced officers / employees at all levels and respond to all natural and man-made disasters. The lowest administrative unit (Sub-Division, Tehsil or Block) will be the first responder as the case maybe. IRT at all levels will have same structure,

i.e. IC supported with Operations, Planning and Logistics Sections. The IRTs areto bepredesignated at all levels.

A. IRT Frame work- District Level

In general, the selection of Section Chiefs is made according to the suitability and capability of the officer. The selection of the Operations Section Chief, however, depends on the nature of the disaster. In case of flood and earthquakes reaching the affected area, rescuing the affected people and providing relief to them is the main task of the responders. People have to leave their home in a hurry and they are not able to take away their valuables. These abandoned houses become vulnerable. The relief materials while being transported also become prone to loot. In such cases, Police and the Armed Forces are the best suited to handle and lead the operations. In case of fire, it will be the District Fire Officer who will be appropriate officer to handle the situation. In case of health related disaster, it would be the Chief District Health Officer and so on.



B. Major Responsibilities and Duties

INCIDENT COMMAND

The Incident Commands responsibility is the over all management of the incident. It is comprised of following positions:

Incident Commander

The Incident Commander has awide variety of responsibilities.

- Assess the situation and/or obtain a briefing from the prior Incident Commander.
- Determine incident objectives and strategy.
- Establish the immediate priorities.
- Establish an Incident Command Post.
- Establish an appropriate organization.
- Ensure planning meetings are scheduled as required.
- Approve and authorize the implementation of an Incident Action Plan.
- Ensure that a dequates a fetyme a sure sare in place.
- Coordinate activity for all Command and General Staff.
- Coordinate with key people and officials.
- Approve requests for additional resources or for there lease of resources.
- Keep agency administrat or informed of incident status.
- Approve the use of students, volunteers, and auxiliary personnel.
- Authorize release of information to the news media.
- Order the demobilization of the incident when appropriate.

Information and Media Officer

The Information and Media Officer is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other Appropriate agencies and organizations. Reasons for the Incident Commander to designate an Information and Media Officer:

- An obvious high visibility or sensitive incident.
- Reduces the risk of multiple sources releasing information.
- Need to alert, warn or instruct the public.
- Media demands for information may obstruct IC effectiveness.
- Media capabilities to acquire their own information are increasing.

Liaison Officer

The Liaison Officer is the point of contact to assist the first responders, cooperating agencies and line departments. It may be designated depending on the number of agencies involved and the spread of affected area. Reasons to establish the Liaison Officer position at an incident:

- When several agencies send, or plan to send, Agency Representatives to an incident in support of their resources.
- When the IC can no longer provide the time for individual coordination with each Agency Representative.
- When it appears that two or more jurisdictions may become involved in the incident and the incident will requireon-siteliaison.

Safety Officer

The Safety Officers function is to develop and recommend measures for ensuringsafety of responders and to assess or anticipate hazardous and unsafe situations andreview it regularly. The Safety Officer will correct unsafe situations by workingthrough the chain of command; however, the Safety Officer may exercise emergency authority to directly stop unsafe acts if personnel are in imminent life-threatening danger.

GENERAL STAFF

Each one has a vital role for efficient response; however, depending upon the natureand requirements of the incident, they may be or not be activated. Each of thesefunctional areas can also be expanded as needed into additional organizational units with further delegation of authority.

Operations Section

The Operations Section deals with all types of field level tactical operations directly applicable to the management of an incident. This section is headed by an Operation Section Chief (OSC). In addition, a deputy may be appointed to assist the OSC ford is charging his functions depending on the magnitude of the work load. Operations Section is further sub-divided into Branches, Divisions and Groups which assist the OSC/IC in the execution of the field operations.

Planning Section

The Planning Section deals with all matters relating to the planning of the incident response. Headed by the Planning Section Chief, this section helps the Incident Commander in determining the objectives and strategies for the response. It works out the requirements for resources, maintains up-to-date information about the ongoing response and prepares IAP. For the closing phase of the operations, the Planning Section also prepares the Incident Demobilization Plan.

Logistics Section

The Logistics Section deals with matters relating to procurement of resources and establishment of facilities for the incident response. This section is headed by the Logistics Section Chief and is an important component of the IRS organization for providing backend services and other important logistic support like communications, food, medical supplies, shelter and other facilities to the affected communities and responders as well. There is a Finance Branch attached to this Section in order to ensure that the procurements, if any, may be done quickly and in accordance with the financial rules.

2. Triggering Mechanism for Deployment of IRS

Some of the natural hazards have a well established early warning system. On receipt of information regarding the impending disaster, the Emergency Operations Center (EOC)will inform the Responsible Officer (RO), who in turn will activate the required IRT andmobilize resources. At times the information about an incident may be received only on itsoccurrence without any warning – in such cases the local IRT will respond and inform thehigher authority and if required seek reinforcement and guidance.

3. Activation of IRS in the District

Before taking up response activities, the DM (RO/IC as per IRS) will hold a briefing meeting and take stock of the situation, availability and mobilization of resources forlisting out the various tasks and to provide proper briefing to the responders. The IAP will be drawn and put in to action based on the situation assessment. The DM/RO will nominate Operations Section Chief (OSC) based on-incident type and rest will follow as per IRS/IRT and other procedural guidelines.

On activation of IRS, all line departments/organizations/individuals shall follow the directions of the Incident Commander as condition demands. He can divert all mechanisms and resources in the district to fight against as cenario leading to disaster/calamity in the district. All Section Chiefs (Operations, Planning and Logistics) are vested with commanding authority and logistic assistance to deliver the concerned responsibility.

4. <u>Incident Action Plan</u>

It is important that activities indicated in the IAP are connected with the functional responsibility defined in IRT and also according to other descriptions as per DDMP. Forinstance, proper links shall be established between IRT and Emergency Support Functions (ESF) for IAP effectiveness. Three basic elements of IAP are: Task /Function /Activity, Department/Officer Responsible, and Time. Besides that, common formsused for performing IRS and IA Pasgiven in IRS National Guide lines may be utilized.

5. <u>Standard Operating Procedures</u>

Standard Operating Procedures (SOPs) are common method of implementing instructions. SOPs provide response protocols for carrying out specific responsibilities. They describe the -who, what, when and how duringa disaster, helping responders to perform complex tasks with high level of coordination. SOPs should be prepare and annexed to the DDMP for all relevant hazards of the district, such as earthquake, flood, cyclone, landslide, tsunami, man-made disasters, etc. It should be based on pre-definedIRTs and ESFs and communicated to every stakeholder in advance.

FUNCTIONAL RESPONSIBILITIES

RESPONSIBLE OFFICER =	PRIMARILY RESPONSIBLE FOR EFFECTIVE RESPONSE
COMMAND =	OVERALL INCHARGE OF THE INCIDENT RESPONSE TEAM AND ITS EFFECTIVE FUNCTIONING
OPERATIONS =	DIRECT AND SUPERVISE ALL TACTICAL ACTIONS
PLANNING =	COLLECT/ANALYZE DATA, WORKOUT NEED OF REQUIRED RESOURCES AND PREPARE ACTION PLAN
LOGISTICS & FINANCE =	PROVIDE LOGISTICS SUPPORT, ROCUREMENT AND COST ACCOUNTING

LIST OF IRS POSITIONS AND SUITABLE OFFICERS IN THE DISTRICT

IRS Position	Suitable officers
INCIDENT COMMANDER	ADM / ADC or any other equivalent officer or as deemed by RO
Deputy IC	SDM or any other equivalent officer or as deemed by IC
Information & Media Officer	Control Room Officer / Emergency Officer or any other suitable position at District level as deemed by IC
Liaison Officer	Dy. Collector (Protocol) / District Public Relations Officer or any other suitable position at District level as deemed by IC
Safety officer	Fire Officer / Dy. SP (Police) / Medical Officer / Factory Inspector or any other suitable position at District level as deemed by IC
OPERATIONS SECTION CHIEF	Dy. Superintendent of Police / ADM / Dy. Collector or any other suitable position at District level as deemed by IC / RO
PLANNING SECTION CHIEF	ADM (Sadar) / Add. SP / Dy. SP / Sr. Deputy Collector / Joint Collector / District Planning Officer / Fire Officer / Medical Officer / NDRF representative (If available) or any other suitable position at District level as deemed by IC / RO
LOGISTICS SECTION CHIEF	Senior Dy. Collector or any other suitable position at District level deemed by IC / RO

The District administration has identified 16 expected task forces for key response operation functions that are described below. Additional taskforces can be added under the operations section as needed by the circumstances of a disaster. Each Task for ceisled by one organization and supported by other organizations.

Emergency Operation Task force	Functions
1. Coordination and Planning	Coordinate early warning, Response & Recovery Operations
2. Administration and Protocol	Support Disaster Operations by efficiently completing the paperwork and other Administrative tasks needed to ensureeffective and timely relief assistance

2 Warning	Collection and discomination of warnings of notantial		
3. Warning	Collection and dissemination of warnings of potential		
	disasters		
4. Law and Order	Assure the execution of all laws and maintenance of		
	orderin the area affected by the incident.		
5. Search and Rescue	Provide human and material resources needed to support		
(including Evacuation)	local evacuation, Search And Rescue Efforts.		
6. Public Works	Provide the personnel and resources needed to support		
	local efforts to reestablish normally operating		
	infrastructure.		
7. Water	Assure the provision of sufficient potable water for human		
	and animal consumption (priority), and water for		
	industrial and agricultural uses asappropriate.		
8.Food and Relief	Assure the provision of basic food and other relief needs in		
Supplies	the affected communities.		
9.Power	Provide the resources to reestablish normal power supplies		
	and systemsin affected communities.		
10. Public Health and	Provide personnel and resources to address pressing		
Sanitation (including First	Public health problems and re-establish normal health		
Aid and all medical care)	Care systems.		
11. Animal Health and	Provision of health and other care to animals affected by a		
Welfare	disaster.		
12. Shelter	Provide materials and supplies to ensure temporary		
	shelter for disaster-affected populations		
13. Logistics	Provide Air, water and Land transport for evacuationand		
	for the storage and delivery of relief supplies		
	incoordination with other taskforces and competent		
	authorities.		
<u> </u>			

14. Survey (Damage Assessment)	Collect and analyses data on the impact of disaster, develop estimates of resource needs and relief plans, and compile reports on the disaster as required for District and State authorities and other parties as appropriate.
15. Telecommunications	Coordinate and assure operation of all communication systems (e.g.; Radio,TV,Telephones,Wireless) required to support early warning or post disaster operations.
16. Media (Public Informatin)	Provide liaison with and assistance to print and electronic mediaon early warning and post-disaster reporting concerning the disaster.

The specific response roles and responsibilities of the task forces indicated above is that the roles and responsibilities will be executed and coordinated through the IRS/GS system.

<u>Task Force, Leader and Supporting Department details in response</u> (INCIDENT RESPONSE SYSTEM)

The COMPOSITION of the TASK FORCES is given in the table below:

No.	Task Force	Task force Leader	Supporting members/	Section/
			Organizations/ Departments	Unit
1.	Planning and	Collector	DDO, DSP, RAC, and Mamlatdar-DM	Planning
	Coordination			
2.	Administration&	Resident Additional	SDM– Mamlatdar – TDO	Liaison
	Protocol	Collector		
3	Damage	SDM	DIC, Dy. DDO, Ex.Engr., R&B, DAO, Fisheries	Logistics
	Assessment/			
	Survey			
4	Warning	Supt. Engr. –	RAC, Factory Inspector, Mamlatdar-DM, Various	Operation
		For Floods &	Departmental Control Room, Member Secretary - OCR	
		Cyclones	control room, District Information Officer (DIO), Police	
		Jt./Dy.DirDISH-For	Dept., Irrigation Dept.	
		Chemical Disaster		
		CP/ DSP –For Terrorist		
		Attack		
5	Communications	Resident Additional	Factory Inspector, Mamlatdar-DM, Various Departmental	Logistics
		Collector	Control Room, OCR control room, Dy.Mamlatdars, Mobile	
			Operators, TV, Radio, Police, Forests	

6	Media	District Information Officer	Information Department, Print, Media, TV, Journalists, NGOs	Public Information
7	Logistics	DDO	RTO, DSO, FPS, Private & Public sector, Municipal water supply Board, Mamlatdar, Dist.Supply Mamlatdar	Logistics
8	Law&Order	SP	DCP, Dy. SP, SRP, Home Guards Commandant, NGOs, Para-military and Armed Forces	Safety
9	Search & Rescue	Add. Collector	DCP, Dy. SP, MAG members from OCR, Mamlatdar, TDO, Police, Executive Engr. RTO, State Transport, Health Dept., SRP ,SDRF, NDRF,Army,Air Force.	Operation
10	Public Works	Engr.R&B (State Panchyat) SE Irrigation	Ex. Engr-R&B (S/C/P), Ex. Engr Irrigation (Circle /Panchayat) , DFO, NGOs, Water Supply Board, Municipalities, Home Guards, P olice	Operation
11	Shelter	Dist. Pri. Edu. Officer & Dist. Edu. Officer	Administrative officer, Education Department, School Principal, Operative Teachers, Health, PHC, State Transport, Water Supply, RTO, Mamlatdar, TDO, NGO ,CBO.	
12	Water Supply	Ex.Engr.GWSSB	Dy.Ex.Engr., Mamlatdar, TDO, Health Dept, Operation Dy.Engr.	
13	Food & Relief Supplies	Dist. Supply Officer	RTO, GSRTC, Municipality, DRDA, Police, Logistics Homeguard, FPS, PDS, Mamlatdar, NGO, CBO Logistics	
14	Power	Supt.Engr.MGVCL	Ex.Engr., Dy.Engr.Technical, GEB, Transport	Operation

15	Public Health & sanitation	СДНО	CDMO, Medical Supt. Civil Hospital, Medical Officer CHCS, Municipality, Red Cross, Fire Brigade, Civil Defense, R&B, NGOs, Doctors, TDO, Mamlatdar	Operation
16	Animal Health & Welfare	Dy.Director Animal Husbandry	Veterinary Inspector, NGOs	Operations

ALERT MECHANISM

Warning, Relief and Recovery

Warning, Relief and Recovery actions are intended to eliminate the loss of life and property and hardship due to disasters. DM Plans and SOPs of different levels, sectors and departments have their own early warning mechanism and imply the same at the time of disaster, further planning for relief and recovery assistance to the affected people have been done during the course of disaster to avoid or reduce losses and hardship.

In district the Collector/ DEOC is the focal point for early warning, relief and recovery aspect, who directs and coordinates these efforts within the district. Collector / DEOC coordinate in early warning, relief and recovery and share / report the steps taken in these regards with similar activities in neighboring districts and with the GSDMA and Revenue Department.

Early Warning Action Plan

The availability of early warning system is a must before early warning message could be disseminate to the people till the last mile. Thus for every type of disaster there is an agency designated with the responsibility of keeping track of developments in respect of specific hazards and inform the designated authorities/agencies at the district level about the impending disaster. Nodal agencies for early warning of different natural hazards are:

Typeof Action	Flood	Cyclone	Chemicaland industrialaccidents
Existing EWS	Irrigation	IMD	Industrial
	department/ Dam authority/	•	Association/industries
	IMD	Collector	↓ ↓
	↓ Collector	↓	DCG
	V	Mamlatdar/TDO	↓
	Mamlatdar/TDO	•	LCG
	Villages	Villages	↓
			Mamlatdar

Responsible	Mamlatdar	Mamlatdar office/TDO	Mamlatdar office/TDO
Agency	office/TDO		
forwarning			
dissemination			
Villages covered	All risk prone villages		
Villages/ habitation	Communities in remote	locations (fisher folk, mald	lharis etc)
not covered or			
Difficult to access			
Measures	Contact of communities	s in remote locations (fisher	^r folk , Maldharis etc)
requiredto			
improvetimeliness			
and outreach (For			
example,			
Voice enabled			
SMS)			

During and Post Disaster Advisory Action Plan:

Typeof Hazard	Flood	Cyclone	Earthquake	Drought	Chemical andindustrial accidents	Tsunami
Responsible Agency	Revenu	ie & Pancha	ayat offices			
Villages covered	All risk prone villages					
Villages/ habitation covered or difficult to access	Communities in remote locations (fisher folk, Mal dharis etc)					
Measures required out reach	Contact of communities in remote locations (fisher folk, Maldharisetc)					

Details of Control Room telephone numbers functioning 24*7 365 days and during the monsoon with some key dignitaries' telephone numbers are as under.

Sr.	Sub	EOCs/ Control rooms	Contact Numbers
No.	Sr.		
	No.		
1		State EOC	23251914, 23251916,
			23251906, 23251900
			23251912(F), 23251916(F)
2		Relief Commissioner	23251509, 26301728 (R)
3		CEO-GSDMA	2325902, 23259275 (F)
4.		Director of Relief	23251611, 23251612
5		Addl.CEO,GSDMA	23259451,23259302(F)
6		Mahisagar District EOC	02674-252300/252301, 02674-1077
	6.1	1.Warning and Communications	02674-252300/301
		(DEOC)	1077
	6.2	2. Law & Order	100
		(SP)	02674-250128/250129
	6.3	3. Search & Rescue	02674-250128/250129 (Police Control)
		For Whole District with support of DSP and Liaison officer	02674-252300/301 (DEOC)
			1077(DEOC)
	6.4	4. Public Works	9925048136
		(Ex.Eng,R&B)	02674-250486
	6.5	5. Shelter	7574822583 (DEO)
		DEO, DPEO	7567804983 (DPEO)

SEOC-DEOC-TEOC and Other Control Rooms

	1. <u></u>				
	6.6	6. Water Supply	9978406620		
		(Ex.Eng.GWSSB)	02674-251580		
	6.7	7. Food & Relief supplies	7574898793		
		(District Supply Officer)	02674-250722		
	6.8	8. Health	7573006971		
			02674-252702		
	6.9	9. Power(Supt.Engr.GEB)	02674-251640/41		
			9925213276		
	6.10	10. Animal Health & Welfare	02674-250144		
		(Asst.Director,A&H)	9924439069		
	6.11	11. Damage assessment/Survey	9825597381		
		(Dy.DDO)	02674-250946		
	6.12	12. Media/public Information	02674-254051		
		(Asst-Dir-Info)	9824646132		
7	Taluka	a EOCs (For Monsoon period)			
	7.1	Lunawada	02674-250013		
	7.2	Khanpur	02674-286451		
	7.3	Santrampur	02675-220026		
	7.4	Kadana	02675-237701		
	7.5	Balasinor	02690-267200		
	7.6	Virpur	02690-277402		
8		Fire Brigade Lunawada	02674-250006 9909973918		
		Fire Brigade Santrampur	02675-220055 9724111001		
		Fire Brigade Balasinor	02690-266188 9328539034		

Emergency Communication Systems

In the event of collapse of any communication facility / Communication infrastructure as acascading effect/consequence of disaster, Telecommunication Task Force shall ensure immediate restoration of such facility or infrastructure to ensure uninterrupted communication for effective disaster management operations.

Radio Communication

All the Control Rooms are equipped with hand held radios and all the task force leaders and their teams are having the hand held radio sets at their respective control rooms. The different user groups are operating at different frequency channels allotted to them for ease in communication in respective groups. at present, -Hand held radio sets are with District Magistrate, DDO, DSP, fire Brigade and Forest department. If possible, Health Personnel may begiven these sets later.

Telephones

Telephone facility is available with all the Control Rooms.

Alternate Communication System

There could be a situation when all the communication facilities and systems may come to halt due to collapse of communication facilities/infrastructures. In the event of such a failure, till the facility/infrastructure is restored made functional, following alternate systems shall be used based on the serioussness of the situation.

Satellite Communication System

Satellite communication shall be activated once all the communication systems fail. This facility is with DEOC. The Telecommunication Task Force shall ensure that this facility is resumed on all such occasions.

Messengers

- Use of messengers as a last resorce to carry the hand written messages to people concerned in dealing with the disaster.

- A dedicated vehicle shall be made available by the Transport Task Force Leader upon request.

<u>Right use of Communication facility</u>

• The sense of urgency that every one experiences during disaster may lead to a chaotic situation if communication systems are not properly used.

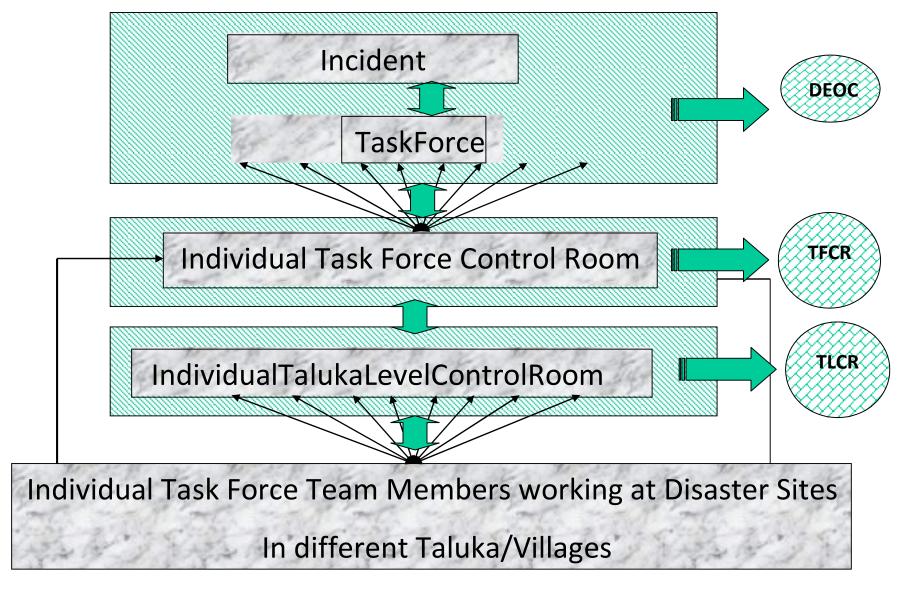
- Communication shall be brie fand simple.
- Telephones, Cellphones, Hot Lines shall be used when ever required.

The table below describes the task force action plans are in tended to identify key actions:

- Before a disaster
- At the time of warning
- As the disaster occurs and
- In periods from:
- 12 to 48 hours
- 48 to 72 hours
- 72 hours and beyond after a disaster

The action plans serve as quick reference guide to individual task force members, as to what specific task forces expect to be doing at specific stages before and after a disaster. This information will improve coordination within and between taskforces and with authorities out side the district.

COMMUNICATION FLOW CHART DURING DISASTER MANAGEMENT



TASK FORCE RESPONSE PLANNING

Emergency Support Functions

<u>CO ORDINATION AND PLANNING:</u> COORDINATE EARLY WARNING, RESPONSE AND RECOVERY OPERATIONS.

Task Force Leader: Collector

Action and (Who Should Take It)	Requirements or Conditions to	Time frame
	Be met for the action can occur.	
	be met for the action can occur.	
Before a Disaster		
Establisha disaster management structure to the village level.	Links to State level and	On-going
(COLLECTOR, DDMC)	Establishment of ICS structure.	
Develop disaster plans at all levels down to the village level.(DDMC)		On-going
Hold regular meetings on disaster management in cluding government,		Yearly.
NGOs and private sectors.(DDMC)		
Continual training, including public awareness. (DDMC andMedia	InvolvementofGSDMA	On-going.
Task Force).		
Check warning, communications and other systems (DDMC), is		On-going.
Including the use of drills.		
Wa	rning	
Hold Crisis Management Committee (Collector)	Communications between Districts	On receipt of warning.
	And with State ControlRoom.	
Mobilize task force satal levels (District, Taluka, village depending on	Communications systems and	As decided byCMC.
disaster) (CMC, Telecommunications, Media Task Forces)	procedures.	
Disseminate Information (CMC, Media Task Force)		As decided.
Mobilizer esources to be positioned near vulnerable points depending	Telecommunications systems,	As decided.
On type of disaster.(CMC)	plans.	

Establish alternate communications system (Telecommunications Task Force)		As decided.				
Disaster						
Start Search, Rescue and Evacuation activities.(CMC)	SAR TaskForce operational.	Immediately				
Begin Collecting Information on extent of damage and areas affected. (CMC)	Assessment teams have Communications and transport.	Started in 4 hours.				
Start plan development and provide instructions on where Task Forces Should go and what they should do. (CMC,Collector)	Information on damage and areas affected.	Started in 4 hours.				
Mobilize out side resources(CMC)	Information on damage and needs.	Started in 5hours.				
Provide Public Information (CMC,MediaTaskForce).		As early possible (or should Be started in 6 hours).				
12	Hours					
Begin regular reporting on actions taken and status by Task Forces. (Task Forces)	Operating communications system.	Startedat 12 hours.				
Reassess damage information, resources, needs and problem areas/activities.(CMC)		Started at 12 hours.				
Beginrotation of staff(CMC)		Startat 12 hours.				
Establish regular liaison with State Control Room.(DEOC)	Working communications systems.	Startat 12 hours.				
Shift focus of efforts to relief.(CMC)		Open				
Restore key infrastructure (CMC through Public Works and other Task Forces)		Before 48 hours.				
48	hours					
Continue review and reassessment of operations(CMC)	Information on operations.					
Conduct broad damage assessment (CMC and DamageAssessment TaskForce)						

Establish Temporary Rehabilitation Plan(CMC)			
Begin demobilization based on situation.(CMC)			
72hours			
Start Rehabilitation activities.(CMC)	Plan		
Conduct detailed survey of damage and needs. (CMC and Damage Assessment Task Force)			
Begin regular reporting on operations.	Information on operations.	As early as possible.	
Restore all public and private sector services.(CMC)		As early as possible.	
Lessons Learnedmeeting.(CMCandothers)		After 2 weeks.	
Final Report/ Case Study(CMC)		After activities completed.	

WARNING: COLLECTION AND DISSEMINATION OF WARNINGS OF POTENTIAL DISASTERS.

Task Force Leader: Resident Additional Collector

Action and (Who Should Take It)	Requirements or Conditions to	Time frame		
	Be met for the action can occur.			
Beforea Disaster				
Verify communication and warning systems are functioning-drills		Every15 days		
Have warning messages prepared in advance.				
Warning				
Receive and dispatch warnings.(Task Force)	Coordinate with	Asreceived.		
	Telecommunications Task Force			
Verify warnings received and understood.(Task Force)		Within 1-2hours of		
		dispatch.		
Independently confirm warnings if possible (TaskForce)		As time allows.		

LAW AND ORDER: Assure the execution of all laws and maintenance of order in the area affected by the incident. Task Force Leader: District Superintendent of Police (ForDistrict)

Action and (Who Should Take It)	Requirements or Conditions to	Time frame
	Be met for the action can occur.	
Defere e D		
Before a D	isaster	
Evaluate expected disaster needs verses normal resources.(Task Force)		Completed in 8 days.
Estimate personnel and resources needed for disasters.(Task Force)	Based on standard for number of	Completed in one week.
	security personnel per population	
	depending on severity of disaster.	
Planning and coordination with Revenue Dept.(TaskForce)		
Conductdrills, including publicawareness generation. (TaskForce)	Includes participation of Media	Every45 days.
	Task Force	
Warni	ng	
Verify communications system.(Wireless Inspector)		1-2hours of warning.
Alert police and otherTask Force members. (Superintendent of Police)		1-2hours of warning.
Implement duty distribution SOP for personnel and other resources.		1-2hours of warning.
(Superintendent of Police)		
Develop preliminary estimate of requirements to support other Task		1-2hours of warning.
Forces.(Superintendent of Police)		
Disast	er	
Get orders on deploying personnel from Control Room.	Operating communications	Immediately
(Superintendent of Police)	system.	
Determine status of staff and facilities. (Superintendent of Police)	Operating communications	1-2hoursofdisaster.
	system.	
Deploy additional staff.(Superintendent of Police)	Transport available.	2-3hoursofdisaster.

Monitor resources.(Superintendent of Police)		1hour of disaster
Establish VVIP unit.(Superintendent of Police)		Immediately.
Request additional resources, if needed. (Superintendent of Police)	Operating communications	4 hours of disaster.
	system.	
12	hours	
Institute regular reporting.(TaskForce)	Operating communications	Atstart ofperiod.
	systems.	
Begin staff rotation.(TaskForce)		At start of period.
Address crowd control problems.(Task Force)		As needed.
Implementanti-looting/anti-theft SOP.(Task Force)		As needed.
Establish rumor control.(Task Force)	Involves Collector, Media Task	As needed.
	Force, NGOs, and local eminent	
	persons.	
Provide information to public,e.g.,road status.(Task Force)	Involves Control Room, Media	As needed.
	Task Force, and Deputy	
	Magistrate.	
481	nours	
Implement a Force Management Plan (increase, reduction,		From star tof period.
redeployment, of forces). (Superintendent of Police)		
Plan for return on ormal ((Superintendent of Police, Task Force,		From 72 hours after the
Control Room)		disaster.
Conduc t Lessons Learned Session (Task Force with input from other		1week after the disaster.
parties.)		
Final Report		2 weeks after the disaster.

SEARCH AND RESCUE (INCLUDING EVACUATION): Provide human and material resources to support local evacuation, search and rescue efforts.

Task Force Leader: Addl. Collector & Liaison officers – SDM

Supportive Task Force Leaders: Dy. SP, Chief Fire Officer

Action and (Who Should Take It)	Requirements or Conditions to	Time frame
	Be met for the action can occur.	
Beforea Disas	ster	
Risk assessment and vulnerability mapping.(Task Force)		Before warning.
Develop inventory of personnel and material resources. (Task Force)		Before warning.
Training. (TaskForce)	Input and support fromGSDMA	Before warning.
Establish public education program. (Task Force)	MediaTas kForce	
Establish adequate e communications system.(Task Force)	Additional equipment required.	
Drills (TaskForce).		Before warning.
Establish transport arrangements for likely SAR operations. (Task	With Logistics Task Force.	Before warning.
Force)		
Develop Rescue SOP.(TaskForce)		Before warning.
Warning		
Mobilize Task Force and SAR teams.(Task Force).		On warning.
Verify equipment is ready.(Task Force).		On team activation.
Confirm transport is ready. (Task Force)	Logistics Task Force.	On warning.
Undertakeprecautionaryevacuation.(TaskForce)	Logistics and Shelter Task Forces	As directed.
Re-deploy teams and resources, if safe. (TaskForce)	Logistics Task Force	Basedon conditions.

Start public awareness patrols. (TaskForce)	Media,Law and Order and Logistics Task Forces.	As required.
Disa	oster	
Assure safety of staff.		Immediately.
Restore own communications.(Task Force)		Immediately.
Dispatch rescue/evacuation teams based on assessments.(Task Force)	Input from Control Room.	Immediately.
Call for additional resources if needed.(Task Force)	Communications systems in operation.	3-4hours of disaster.
Provide reports on operations.(TaskForce)		Startingat 3 - 4hours.
Begin handling of deceased per SOP.(TaskForce)	Various Revenue officers and Police involved.	Startingat 3- 4hours.
12H	ours	
Begin staff rotation system.(TaskForce).		Started at12hours.
Begin specialized rescue (may begin earlier). (Task Force)	May require outside resources, Coordination with Logistics Task Force.	Started at12hours.
Begin debris removal in cooperation with Public WorksTask Force.	Focus on critical infra structure. Liaison with Contro IRoom.	Startat 12hours.
Secure additional resources (e.g. fuel, personnel) for continued operations.(Task Force).		Startat 12hours.
48 h	nours	
Demolish/ Stabilize damaged buildings incooperation with Public Works Task Force.	Logistics Task Force, workers, equipment.	Starting at 48 hours.

Demobilization, reconditioning, repair and replace equipment and other resources.(TaskForce)	Based on nature of disaster.
Remain on stand-by for additional operations, particularly related to Safety of recovery work.(Task Force).	As needed.
72hour	s
Lessons Learned meeting. (Task Force and others)	After 2 weeks.
Final Report.(Task Force)	After major activities completed.

PUBLIC WORKS: Provide the personnel and resources needed to support local efforts to re-establish normally

operating infrastructure.

Task Force Leader: Executive Engineer, Roads and Buildings

		c
Action and (Who Should Take It)	Requirements or Conditions to	Time frame
	Be met for the action can occur.	
Before a Di	saster	
Inventory of personnel, equipment and status of infrastructure. (Task	Link to DRM project databased	One week before
force)	development.	warning.
Identify critical infrastructure.(Task Force)	Need to define what critical	Before warning.
	infrastructures.	
Identifyalternatetransport routesand publishmap. (TaskForce)		Before warning.
Plan for prioritized post-disaster inspection of infrastructure. (Task		
Force)		
Establish and maintain a resources and staffing plan.(TaskForce)		
Plan to provides an itation and other facilities for shelters.(TaskForce)		
Warniı	ng	
EstablishControlRoom.(TaskForce)		Nolaterthan 6hours
		From warning.
Mobilize Task Force and personnel.	Requires communications.	No later than 6hours
		From warning.
Liaise with District Control Room.(TaskForce)		No later than 6 hours
		From warning.
Verify status and availability of equipment and re-deploy if appropriate	Coordination with Logistics Task	24 hours from warning.
And safe. (Task Force)	Force and Control Room.	

Review plans. (TaskForce)		No later than 6 hours from warning.
Disas	ster	
Begin damage assessment and inspections.(Task Force)	Coordination with Damage	Within 12 hours of
	Assessment Task Force.	disaster.
Develop operations plan and communicate to Control Room.		Within 12 hours of
		disaster.
Mobilize and dispatch teams based on priorities. Team will (1) repair,	Coordination with Logistics,	Within 12 hours of
(2)replace, (3)Build temporary structures	Water, Power Task Forces and	disaster.
(Fore.g.,restfacilities,shelters).	Control Room.	
Collaborate withother Task Forces.		Continuous.
12 Ho	urs	lL
Begin staff rotation syste mandman power planning.(TaskForce).		Starter at12 hours.
Mobilize additional resources based on expected duration of	Coordination with LogisticsTask	Started at12hours.
operations.(TaskForce).	Force,Contractors.May need	
	additional funding.	
Assure safety.(Task Force)		Start at 12 hours.
Establish security arrangements.(TaskForce)	Law and OrderTask Force.	Start at 12hours.
Provide public information on roads, access and infrastructure. (Media	Coordination with Control Room	Startat 12hours.
Task Force)		
48 hc	ours	·
Start detailed survey.(Task Force)	In cooperation with Damage	Starting at 48hours.
	Assessment Task Force.	

Begin reporting on operations Task Force)		Starting at 3days.
Action and (Who ShouldTakeIt)	Requirements or Conditions to be met for the action can occur.	Time frame
Reconditioning, repair and replace equipment and other resources.		Based on nature of
(Task Force)		disaster.
Plan and start demobilization.(Task Force)		Starting at 3days.
72hour	5	
Develop longtermres to ration planand start activities.(TaskForce)		From 72 hours.
Lessons Learnedmeeting.(Task Force and others)		After 2 weeks.
Final Report.(Task Force)		After major activities completed.

WATER SUPPLY: Assure the provision of sufficient potable water for human and animal consumption (priority), and water for industrial and agricultural uses as appropriate.

Task Force Leader: Executive Engineer, Gujarat Water Supply and Sanitary Board

Action and (M/ha Should Take It)	Requirements or Conditions to	Time frame
Action and (Who Should Take It)	Requirements or Conditions to	Time traine
	Be met for the action can occur.	
Before a Disa	ister	
Establish water availability, capacities, reliabilities and portability.	Stand ard of 20 litres of drinking	3 months before
(Task Force)	Water perperson per day.	warning.
Plan for alternate water delivery and storage (TaskForce)	May need tankers, tanks, generator	3 months before
	set.	warning.
Secure new and additional equipment.(Task Force)	Requires funding.	
Secure extra stocksof chemicals, expendable supplies and equipment.	May require additional funding.	3 months before
(TaskForce)		warning.
Open Water Control Roomin Monsoon.(Task Force)		Done.
Warning		
Establish staff rotation and shift system.(TaskForce)		No latert han 24hours
		From warning.
Provide public awareness on use of water.(TaskForce)	MediaTask Force.	No later than 24 hours
		From warning.
Provide in structions to government and private sectors on protection of		No later than 24hours
Water supplies.(TaskForce)		From warning.
Mobilize Task Force members.		24 hours from warning.

Action and (Who Should Take It)	Requirements or Conditions to	Time frame
	Be met for the action canoccur.	
Mobilize additional personnel and vehicles. (Logistics Task Force)	May be difficult to locate additional	24 hours from warning.
	personnel locally. Recourse to	
	outside or contractor sources may	
	be required.	
Coordinate activities with Power and other Task Forces.	Involves District Control Room.	24 hours from warning.
Verify water source status and protection.(Task Force).		No later than 24hours
		From warning.
Disa	ster	
Plan and prioritize supply of water to users.(Task Force)	Requires information on needs,	Completed by 24 hours
	Damage and demand.	Into disaster.
Mobilize water tankers.(TaskForce)	Coordination with Logistics Task	Started by24 hours
	Force and Control Room.	Into disaster.
Repair/restore water systems,based on plan.(Task Force)	Coordination with Power and	Started by24 hours
	LogisticsTask Forces.	Into disaster.
Assuresupplypoint/distribution security.(Law and Order Task Force)		Started as soon as
		Distributions begin.
Coordinate distribution of water and storage and provision of	Coordination with MediaTask	Started by24 hours
Information on safe water use.(Task Force).	Forceand Control Room	Into disaster.
12H	ours	
Establish temporary water systems.(Taskforce)		Upto72 hours from
		disaster.
Move to ward permanent water supply system.(Task force)		After72 hours.

Complete long term recovery plan and needs. (Task Force)		After 72 hours.
Action and (Who Should Take It)	Requirements or Conditions to Be met for the action can occur.	Time frame
Begin reporting and documentation.(TaskForce)		From 48hours.
Begin demobilization.(TaskForce)	Coordinatedwith ControlRoom.	From 48hours.
Lessons Learned meeting.(TaskForceandothers)		After 2weeks.
Final Report.(TaskForce)		After major activities completed.

FOOD AND RELIEF SUPPLIES: Assure the provision of basic food and other relied needs in the affected communities. Task Force Leader: District Supply Officer

Action and (Who Should Take It)	Requirements or Conditions to Be met for the action can occur.	Time frame
Beforea	Disaster	JL
Establish procedures and standards.(Task Force)	Need standards.	On-going.
Maintain two months stock of essential supplies.(Task Force)		Done.
Develop transportation plan.(TaskForce)	In cooperation with Logistics Task Force.	Completed in 8 days.
Developlist of NGOs.(Task Force)		Done.
Plan staffing for disaster.(Task Force)		Done
Identify locations, which can be isolated and increase stock as needed.		On-going.
(TaskForce)		
Identify food preparation locations.(TaskForce)		Done.
Wa	rning	
Passon warning.(Task Force)		With in 12 hours of Receipt of warning.
Alert NGO stop repare food.(TaskForce)	Contact with NGOs.	Within 12 hoursof Receipt of warning.
Verify stock levels and make distribution plan.(TaskForce)	Possible cooperation with Logistics Task Force.	Within 48 hours of Receipt of warning.
Alert transport contract or stop repare for transport. (Task Force)	Co ordinate with Logistics Task Force.	Within 5 hours of Receipt of warning.

Mobilize staff. (TaskForce)		Within 6 hours of receipt of warning.
Disa	ster	
Receive and respond to instructions from Control Room.(TaskForce)		As received.
Monitor conditions of stocks and facilities.(Task Force)	Need for communications.	
Develop distribution plan.(Task Force)	Need information on needs and	As requested by
	locations.	Control Room.
Order food packets and provide suppliesas needed.(TaskForce)	Coordination with Logistics Task	Perdistribution plan.
	Force.	
Establish relief supplies reception scenters.(Task Force)	Coordinate with Control Room	As required.
	And Logistics Task Force.	

12	Hours	
Start distribution no perations.(TaskForce)	In coordinate on with Logistics and Shelter Task Forces.	At beginning of period.
Formalize reporting, communication sand monitoring.(TaskForce)		Completed by 48 hours.
Start staff rotation system.(Task Force)		At beginning of period.
Begin mobilizing and managing additional supplies.	Coordination with Logistics and, Control Room.	Underway in 48 hours.
Establish security for all sites.(Law and Order Task Force)		At beginning of period.
Begin public announcement of distribute on plan and standards. (Media Task Force)		Under way in 48 hours.
48	Hours	
Shift to normal operations.(TaskForce)		Within1 week.
Reconcile receipts and distribution records.(TaskForce)		Within 30days.

Continue providingre lief to special areas/populations.(Task Force)	For 15 days from the disaster	
72Hours		
Restore Public Distribution System.(Task Force)	From 1week after the	
	disaster.	
Lessons Learned meeting.	Within 14 days of	
	disaster.	

<u>POWER:</u> Provide resource store-establish normal power supplies and systems in affected communities Task Force Leader: Superintending Engineer, Madhya Gujarat Vij Company Limited (MGVCL)

Action and (Who Should Take It)	Requirements or Conditions to Be met for the action can occur.	Time frame
Before a Disaster a	nd Warning Phases]
Develop inventory of current status of power system and resources. (MGVCL)		
Establish minimum stock levels and procurenecessary additional stocks.(MGVCL)		
Conduct monthly meetings.(MGVCL)		On-going
Develop contact lists.(MGVCL)		
Conduct informal hazard and risk assessment.(MGVCL)		
Develop disaster plan.(MGVCL)		
Disa	ster	
Assess impact according to SOP.(MGVCL)	Coordinate with Control Room And Damage Assessment Task Force.	
Prioritize response actions.(MGVCL)	Need to establish priorities.	
Collect more information.(MGVCL)		
Mobilize additional resources.(MGVCL)	Coordination with Control Room And other Task Forces.	
12H	ours	
Revise plans based on feed back and assessments.(MGVCL)		Continuous
Monitor status of actions.(MGVCL)		Continuous

Begin staff rotation plan. (MGVCL)	At beginning of period.
Disseminate public information. (MediaTask Force)	At beginning of period.

Action and (Who Should Take It)	Requirements or Conditions to Be met for the action can occur.	Time frame
Secure support for staff (food,lodging) fromNGOs.(MGVCL)		
Assure security as needed.(Law and Order TaskForce)	Coordinate with Control Room.	
Establish constant communications on needs, requirements and Resources with Control Room, MGVCL.		
48 Hou	<u> </u>	
Look for improvements in efforts.(MGVCL)		
Reinforce central coordination.(MGVCL)		
Conduct regular coordination meetings with other actors.(MGVCL)		
Begin form all documentation of efforts.(MGVCL)		
72 Hou	s	
Review shift plan for safety.(MGVCL)		
Plan for return to normal, including additional security if needed. (MGVCL)	Involvement of Law and Order Task Force.	

PUBLIC HEALTH AND SANITATION (INCLUDING FIRST AID AND ALL MEDICAL CARE): Provide personnel and resources to address pressing public health problems and re-establish normal health care systems.

Task Force Leader: (1) RDD/ CDMO- Civil Hospital

(2) Chief District Health Officer /Med. Supt.-Civil Hospital

Action and (Who Should Take It)	Requirements or Conditions to Be met for the action can occur.	Time frame
Before a Di		
Develop in ventory of personnel, resources and facilities.(Task Force)		1week.
Training.(TaskForce)	CoordinationwithGSDMA.	6months.
Establish Control Room.		
Prepare for specific diseases by season (e.g., monsoon)		
Establish Epidemiological Reporting System (ERS).(Task Force)		
Identify disease vulnerab leareas.(CDHO)		
Improve public awareness.(MediaTask Force)		
Warniı	ng	
Send out warning to health facilities.(Task Force)		As received.
Mobilize health teams to possible disaster areas.(TaskForce)	In coordination with Control Room.	As needed.
Activate Task Force for whole district.(DHO)		On warning.
Disaster	·	
Begin first aid efforts.(Task Force)		Within 1 hour of disaster.
Establish status of health care system.(Task Force)	Requires communications.	Within 6 hours of disaster.

Involves cooperation with Law And Order and SAR Task Force.	Within 1 hour of disaster.Within 2-3 hours of disaster.Within 3 hours.
Involves Telecommunications and Logistics Task Forces and Control Room.	disaster.
Involves Telecommunications and Logistics Task Forces and Control Room.	Within 3 hours.
Logistics Task Forces and Control Room.	Within 3 hours.
Coordination with Public Works,Power,Water,and Law and Order TaskForces.	Within 24 hours.
	Within 24 hours.
	At beginning of period.
	Within 24 hours.
In coordination with Control Room.	2-3hours.
s	
	At beginning of period.
	At beginning of period.
	At beginning of period.
	Implementsin one week.
	At beginning of period.
	Order TaskForces.

Action and (Who Should Take It)	Requirements or Conditions to Be met for the action can occur.	Time frame
	72 Hours	
Develop demobilization plan.		By beginning of period.
Lessons Learned meeting.		Within 14 days of disaster.
Final Report		Within 14 days of disaster.

ANIMAL HEALTH AND WELFARE: Provision of health and other care to animals affected by a disaster.

Task Force Leader: Deputy Director, Veterinary and Animal Husbandry

Action and (Who Should Take It)	Requirements or Conditions to Be met for the action can occur.	Time frame
Before a D	lisaster	
Update animal list. List of staff & training for disposal of carcass.		Done.
(Task Force)		
Stock medical supplies and vaccines. (Task Force)		Done
Warning		
Alert staff(by phone). (Task Force)		As warnings received.
Distributes upplies to vulnerable areas.(Task Force)		During warning period.
Contact Control Room.(Task Force)		As required.
Disast	ter	
Remove and destroy carcasses.(TaskForce)	Need fuel and logistics.	As soon as possible.
Treatinjured animals.(TaskForce)		As soon as possible.
Issuecertification of death. (Task Force)	Forinsurancepurposes.	Within 48 hours.
Callin staff from other districts as needed.(Task Force)		As needed.
Assist local authorities insurvey of damage and reconciliation of		As required.
records.		
48 Hours and	d Beyond	
Assist local authorities in providing fodder as needed.		As required.
Collect feedback.(Task Force)		
Final Report.(TaskForce)		In 15days.

<u>SHELTER:</u> Provid ematerials and supplies to assure temporary shelter for disaster-affected populations. Task Force Leader: District Primary Education Officer

Action and (Who Should Take It)	Requirements or Conditions to Be met for the action can occur.	Time frame
Boford	a Disaster	
Develop shelter operating procedures.(Task Force)		
Developin ventory of shelters (location,capacity,).(Task Force)	UNDP project in ventory.	
Provide information to other Task Forces on location of	Logistics, Water, Power, SAR,	
shelters.(Task Force)	Food/Relief Supplies Task Forces	
	And Control Room	
Training for shelter managers.(Task Force)	Need training module.	
W	arning	
Mobilize shelter managers.(Task Force)		Within 6 hours of
		warning.
Review shelter locations for operating status.(Task Force)	Communications needed.	Within 6 hours of
		warning.
Open shelters as instructed.	Coordination with Contro IRoom.	Within 6 hours of
		warning.
Mobilize additional resources for shelters and camps.(Task Force)	Cooperation with Logistics, Food	Within 6 hours of
	And Relief Supplies, Water	warning.
	and Power Task Forces.	
Provide public announcements on locations and status of shelters.		Within 6 hours of
(Media Task Force)		warning.
 Di	saster	
Beginning logging-in of occupants.(Shelter managers).		Immediately.

Report on status of shelters.(Task Force)	To Control Room.	As needed.
Plan for prioritization of shelter use.(Task Force)	Coordination with evacuation	Immediately.
	Operations and ControlRoom.	
Coordinate with other Task Forces on water, power, food, health,		Immediately.
security. (Task Forces)		
Provide support and assistance to occupants.(Task Force)	Liaise with Animal Task Force on	
	management of animal and with	
	HealthTask Force on health care.	
12 H	ours	·
Continue operations.(Task Force)		Continuously
Monitor shelter status and movement of people.(Task Force)		Continuously
Mobilize additional resources.(Task Force)	Coordinate with Control Room	Continuous.
	And Logistics Task Force.	
48 Hours a	nd Beyond	·
Begin Demobilization as appropriate.(Task Force)		
Begin reconditioning / repairs to shelters. (Task Force)	In cooperation with Public Works	As needed.
	Task Force.	
Lessons Learned session. (Task Force)	Involvement of other Task Forces	14 days after
	and evacuees.	completion of
		operations.
Final Report.(Task Force)		1 months after
		completion of
		activities.

LOGISTICS: Provide air, water and land transport for evacuation and for the storage and delivery of relief supplies incoordination with other Task Forces and competent authorities.

Task Force Leader: District Development Officer

Action and (Who Should Take It)	Requirements or Conditions to	Time frame
	Be met for the action can occur.	
Before a Dis	aster	
Conduct resource in ventory (air/land/water transport and storage; inside		1 month.
And out side district.).(Task Force)		
Establish deployment requirements, procedures and alternate options. (TaskForce)		1 month.
Conduct drills.(Task Force)		1 month.
Coordinate with other Task Forces.	Work though Control Room.	As needed.
Warning	 	
Alert and mobilize Task Force members. (Task Force)		Within 1 hour of Receiving warning.
Mobilize transport and other resources for action on short notice Depending on disaster expected.(Task Force)	Coordination with Control Room	Within 2-3 hours of warning.
Liaise with Control Room and SAR, Shelter and Food/Relief Supplies Task Forces.		Within 1 hour of Receiving warning.
Review plan and determine if out side resources are needed.(Task Force)		Within 6 hours of Receiving warning.
Plan for logistics based depending on nature of disaster.(Task Force)	Coordinate with Control Room And Food and Relief Supplies Task Force.	As needed.
Disaste	r	
	Page 94	

Take action based on instruction from Control Room.(Task Force)		Within 2 hours of
		receiving warning.
Continually review requirements and resources.(Task Force)		Continuous.
Develop operations plan. (Task Force)	Coordinate with Control Room and	Within 2 hours of
	Food and Relief Supplies Task	receiving warning.
	Force.	
Strengthen liaison with Control Room and key Task Forces. (Task		Within 2 hours of
Force)		Receiving warning.
12Hour	S	
Respond to increased demand for logistics.(Task Force)		Continuous.
Begin rotation of staff.(Task Force)		Atstart ofperiod.
Establish logistics bases as needed. (Task Force)	Coordinate with Control Room and	Continuous.
	Food and Relief Supplies Task	
	Force.	
Review plans and communicate with other Task Forces.(Task Force)		Continuous.
Begin regular reporting and documentation.(Task Force)		At start of period.
48 Hou	rs	
Reassessneeds and requirements. (Task Force)		Continuous.
Begindemobilizationasappropriate. (TaskForce)		
72 Hour	·s	
Lessons Learned meeting.	Include Shelter, Food and Relief	Within 14days of
	Supplies in meeting.	disaster.
Final Report		Within 14days of
		disaster.

DAMAGE ASSESSMENT AND SURVEY: Collect and analyze data on the impact of the disaster, develop estimates of resource needs and relief plans, and compile reports on the disaster as required for District and State authorities and other parties as appropriate.

Task Force Leader: Resident Additional Collector

Action and (Who Should Take It)	Requirements or Conditions to	Time frame
	Be met for the action can occur.	
Before a Dis	aster	
Establish assessment procedures and forms.(Task Force)	Collaboration with GSDMA.	
Compile base line data.(Task Force)	Collaboration with UNDP project.	
Establishassessmentgroupsandteams.(Task Force)		
Develop an assessment coordination plan.(Coordination and Planning Task Force)		
Develop acommunications plan.(Task Force)	In cooperation with	
	Telecommunications Task Force.	
Warnin	g	-
Mobilize Task Force. (Task Force)		Within 6 hours of warning.
Review Plan.(Task Force)		Within 6 hours of warning.
Consider pre-disaster impact assessment.(Task Force)	Based on expected nature of disaster.	Within 6 hours of warning.
Active village-level assessment teams.(Task Force)		Within 6 hours of warning.
Disaste	r	
Consider safety of assessment teams.(Task Force)		Immediately.
	Page 96	-

Start planning for assessment.(Task Force)		As initial impact
		information is
		available.
Begin initial assessment procedures.(Task Force)		When conditions allow.
Communicate assessment plans to Control Room.(Task Force)		Onc einitial plan is
		developed.
12 Hour	S	
Publicly disseminat eassessment plans and reports.(Media Task Force)		As available.
Initiate continual updating of assessment information.(TaskForce)	Coordinate with Coordination and	
	Planning Task Force.	
Initiate continual updating of assessment plans.(Task Force)	Coordinate with Coordination and	
	Planning Task Force.	
Coordinate with other Task Forces.(Task Force)		
Begin staff rotation and secure more staff as needed.		At beginning of period.
48 Hour	S	
Prepare detailed damage, losses, needs assessment and long term	Coordinate with other Task	3-5day safter disaster.
Recovery plans.(Task Force)	Forces.	
Coordination of requirements, plans and activities.	Working through Control	Continuous.
	Roomand Coordination and	
	Planning	
	Task Force.	
72 Hour	S	
Lessons Learned meeting.	Include Shelter, Food and Relief	Within14 days of
	Suppliesin meeting.	disaster.

TELECOMMUNICATIONS: Coordinate and assure operation of all communications systems (e.g., radio, TV, phones, wireless) required to support early warning or post-disaster operations.

Task Force Leader: Sub DivisionalEngineer(MIS)-BSNL

Action and (Who Should Take It)	Requirements or Conditions to	Time frame
	Be met for the action can occur.	
Before a Disa	aster	
Develop telecommunications inventory and SOPs. (Task Force)	Telecommunication straining.	
Coordinate with other Task Forces.(Task Force)		
Identify sites of vulnerable system components. (Task		
Force)		
Ensurer edundancy in communications systems.(TaskForce)	May require close liaison with	
	Private sector providers.	
Training in communication skills and methods.(Task Force)		
Warning	5	
Verify communication systems are working.(Task Force)		Within 24 hours of
		warning.
Mobilize Task Force.		Within 24 hours of
		warning.
Repair down systems and establish alternate communications systems.	Coordinate with Control Room.	Within 24 hours of
(Task Force)		warning.
Mobilize resources.(TaskForce)		Within 24 hours of
		warning.
Facilitate telecom demands of other Task Force members.(Task Force)		
Disaster		
Check status of communication systems.(TaskForce)		In 2-3hours.

Identify damage to systems.(Task Force)		First information available in 2-3hours.
Contact Control Room and other Task Forces on telecom needs. (Task Force)		In 2-3hours.
Start repairs.(Task Force)		In 2hours.
12 Hou	irs	
Mobilize out side resources (may start earlier).(Task Force)		Continuous.
Complete plans for repairs and re-establishment of systems. (Task Force)	Coordinate with Control Room.	Continuous.
Liaise with Control Room and other Task Forces.		
Start shift system for staff.(Task Force)		At beginning of period.
48 Hours and	l Beyond	
Continue to assist other Task Forces.(Task Force)		
Continue repair work. (Task Force)		
Begin demobilization.(Task Force)		
Lessons Learned meeting.	Include Shelter, Food and Relief Supplies in meeting.	Within14 daysof disaster.
Final Report. (TaskForce)	Involve other Task Forces.	Within one months of End of operations.

MEDIA & INFORMATION MANAGEMENT:

Task force Leader: Ass.Director Information

Action and (Who Should Take It)	Requirements or Conditions to be met for the action	Time frame
	can occur.	
	Before a Disaster	
Coordination with various Printand TV Media	Disseminate the DRMP rogramme Activities	
Awareness Generation Programmes for Media	May have workshops and seminars	
Massawareness for community	Largescale publicity for community awareness	
During Disaster		
Media Briefing Meeting	Timely Briefing of the situation	After every 4 hours
Supporting Incident commander and other leaders	Discuss current media briefing status in meetings	Everyday
Ensure proper and correct coverage	Steps taken to minimize the rumors	As and when find required

Standard Operating Procedure and Roles and Responsibilities of Different Key Departments and Task forces

The Present plan document identifies the roles and Responsibilities of the organization, inkey identified sector. Taskforces have constituted for taking response measures in sectors. Action plan has been prepared for each task force which covers their roles & responsibilities in development of incident / emergency. It is expected that each task force shall develop the standard operating procedures for specific disaster / emergency. District collector has to ensure that all the members acquire knowledge and skills to perform their assigned roles.

A)DISTRICT MAGISTRATE & COLLECTOR

- Being chairperson and Incident commander of the district for Disaster Management, he will be in over all command & emergency action to control a kind of emergency effectively for the district.
- The Chair personhas to perform the roleas follows:
- Preparation and updating of District Disaster Management Plan for the District.
- To ensure that every one is able to perform the role involved in emergency service effectively.
- To activate and maintain the District Control Room round the clock. To provide essential facilities with the District control room.
- To access emergency situation and have to declare the emergency, call and direct the emergency services to respond the emergency by providing reinforcement and support by pooling the resources form the District and if required from the State.
 - The arrangement for rescue, evacuation, shelter, food, water, clothing, and transportation to affected area, announcement to the public.

To keep inform to the higher authority time to time to declare the withdrawal or termination of emergency.

Rehabilitation, Restoration, Cleaning, etc. on post emergency actions.

- To submit the reports on emergency.
- To conduct the meetings.
- To conduct the mock drill.

B) DISTRICTDEVELOPMENTOFFICER

- Being a responsible person of Taluka / District the following actions are to be given prime importance for emergency purpose.
- To ensure the different authorities, agencies, organization persons, as specified their role, should participate immediatelyduringemergencyin district pocket area.
- To advice and guide different panchayat department and local representatives for mitigate and preventives aspects of disaster management and coordinative approach at the time of emergency.
- To participate in the meeting, mockdrill & training.
- To prepare own detailed action plan to ensure effective control on emergency.
- To liaison & co-ordination with chair person, Central Control Room, emergency services, organization, agencies, agencies person etc. To support all other dutiesas specified byDistrict Collector.

C)POLICE DEPARTMENT

 An other authority who gets the first information on incident /accidentis police department.

The following actions are to be carried out by police department.

- To access the situation and report immediately.
- To maintain the law and order during the emergency to control the traffic and control the affected area.
- To protect the life of people, inside, outsideaswell asroadmovers.
- To protect the property & environment & public announcement.

- Evacuation, rehabilitation, shelter & transportation work during the emergency as per prevailing situation.
- To help & assist to make area clean, removing of any structure and other similar work as required during actual emergency.
- To participate the meetings & Mock Drill/Rehearsal & Training.
- To liaison with Central Control Room and other emergency services /organization /agencies.
- To prepare their own details action plan & to ensure the provisions to handle the emergency.

D)FIRE SERVICES

- Most probably, the first information regarding any incidence / event is received by the fire services. Thus, fire service being first informant has to play the major role during the emergency.
- Inspection, survey & assess the situation where incident occur & give the report.
- To decide the proper & effective actions and immediate response actions to control the emergency, under intimation to Central Control Room or Chair Person.
- Proper training to fight against different hazards
- Rescue, Evacuation, Remove of debris, and oth eremergency workas directed or instructed.
- The knowledge & information on different type of alternative resources, various types of extinguishing media, neutralizing media, chemical properties and their hazards with safehandlingprocedure.
- To participate the meetings Mock Drill / Rehearsal & training.
- To liaison with Central Control Roomand other emergency services.
- To prepare their own details action plan&to ensure the provisions to hand let he emergency.
- Other duties as required during actual emergency.

E)HEALTH DEPARTMENT

- The health and medical services have to play vital role following the emergency. One fold is proper & timely treatments to the victims injured or affected persons. Other fold is to safeguard the publichealth.
- To ensure the arrangement & preparedness for special medical treatment antidotes and trained doctor Para-medical staff as specified in toxicology at the time of industrial emergency in local pocket area.
- On declaration of emergency or on receiving the message or information, prompt medical facilities should be set up e.g. first aid post, casualty receiving center/ camp, as per gravity of situation at site. Similarly, arrangement for emergency operation or special treatment on chemical burn, injury, gas dispersion etc. with adequate arrangement, which will can serve the purpose of Base Hospital.
- Identification of dead bodies and post mortem arrangement.
- To maintain up to-date list with telephone nos. of services of doctors, hospitals,
- Ambulance, primary health center, Para-medical staff, vehicle to meet the emergency situation.
- Arrangement to inform the up to-date status time to time to DEOC, Chair Person, and Relatives of injured or admitted patients, emergency services etc.
- Arrangement to safe guard the public health in case of development of epidemic situation & announcement on safety measure to be taken by public at the time of emergency situation.
- To advice & guide the different stake holders in respect of medical & health part time to time.
- Provision for proper and adequate medicines, life saving drugs, equipments, antidotes etc. related to different hazards.
- To participate meetings, mock drills /examine and training.
- To prepare own detailed action plan to ensure the effective handling of different kinds of emergencies.

- To liaison with DEOC, Chairperson, emergency services organization, agency and other related person.
- Other duties as required during actual emergency.

<u>F)</u> <u>RTO</u>

- To respond to collector and police instructions in different kinds of emergency
- To provide adequatere quirements for both persons and material.
- To arrange for deployment of vehicles with full fuel levels.
- To streamline traffic flow and parking yard movement.
- To co-ordinate in deployment of vehicles, if required.
- To participated meeting, mockdrills&training.
- To prepare own detailed action plan to ensure effective handing at the time of actual emergency.

G)Civil Supplies Department

- To arrange to provide cooked food and clothing to evacuees and others involved in emergency controlling operation.
- To ensure availability of sufficient cooked food, water ready for distributaries at various locations.
- To participate in the meeting, mockdrills & training.
- To prepare own detailed action plan to ensure effective handling of emergency.

H) Asst.Director-Information

- The proper and correct news should be reach to the public to avoid rumours and panicky. The role of District information officer is to create awareness and preparedness amongst the public for different hazards because of wide & fast spreading news.
- To participate in the meeting, mockdrill /exercises and training.

- To assist the public in case of rescue operation and authentic news.
- To liaison&Co-ordination with Chairperson, Central Control Room and emergency services.
- Ensure to safeguard the public at large during actual emergency by providing correct reliable authentic guidelineand news.

I) ELECTRICITY BOARD (MGVCL)

- To arrange forun-interrupted power supply, if needed.
- To arrange for lighting at temporary medical camps, rallying points and parking yards.
- To take care of electrical equipment within affected zone.
- Arrange for switching off power supply if requested by authority.
- To participate in the meeting, mockdrills&training
- To prepare own detailed actionplan to ensure effective handling of emergency

J) Regional Officer (GPCB)

- **To participate in the meetings, mockdrill/ exercises and training.**
- To prepare own detailed action plan to ensure the effective control of industrial emergency & subsequentaction.
- Liaison with central control Room, chair person, Emergency Services, Organization agencies & other relatedpersons.
- Advice&Guidance to the District Crisis Group in Respect of environment protection in the industrial pocket.
- To provide the technical input regarding environment and evaluate the contamination or adverse effect during industrial emergency.
- To provide the details &information on development of emergency situation regarding in safe level to the life and suggest area to be evacuated and other safety measures.
- Other duties or work as directed by District crisisgroup or chairperson.

K) Representative Form MAH Units

The management of major accident hazardous unit has to maintain up dated onsite emergency plan with necessary details with accurate information and a correct assessment of the situation. The site main controlleris responsible to provide immediately on occurrence of crisis at his unit with specific details, development and needed help from local crisis group & district crisis group. He will arrange & provide all the resources, equipments, manpower, and communication network form his own unit and co-ordinate with local crisisgroup & district crisis Groupto combat the industrial emergency.

L)Role of other members of District Crisis Group

- The other members like controller of explosives, trade union representative, agriculture department, and other government agencies, etc. have to perform the various duties. However, the following are the suggested duties as required during the emergency:
- To participate in the meeting, mockdrill/exercise and training.
- To assist the public in proper way incase of rescue and evacuation during actual emergency.
- To advice and guidance to the District crisis group & Chairperson.
- To arrange and help the supporting actions and duties in respect of industrial emergency
- To provide more and adequate resources & various requirement to tackle the industrial emergency immediately.
- Liaison &co-ordination with Central Control Room and emergency services.

M) Volunteer Organizations (N.G.O.)

The voluntary organization / services can play vital role in relief & rescue operations like arrangement of food packets & packing up of the same, distribution of the food packets and drinking water, arrangements of life saving drugs&distribution of the same, can play a major role in awareness generation, to

Page107

convince the person / public to evacuate the residence / place and to shift to safe shelter timely during emergency. Other wise it may result more serious effect. To save the life of public is more important factor, which will be successfully carried out by the voluntary organization. The list of such organization with address, telephone no. organization etc. will be prepared and up-dated time to time.

N) Railway Authority

- On getting information at the time of disaster from Central Control Room, the Divisional Manager, Western Railway, Godhra will take following actions:
- To issue the standing instruction to all railway gates to take actions on receiving the message from the Station Master.
- To decide authority level of railway staff to take actions.
- To carry out evacuation y railway, if required.
- To take care of floating population at railway stations and on board travelers.
- To issue the standing instruction to station Masters on up and down railway stations to stop the train as soon as emergency message is received from DEOC and CCR.

O)Irrigation Department

- Play vital role in pre, during and post form of emergencies particularly in floods.
- Pro per management of dams, irrigation canals, ponds and timely maintenance of the same.
- Inform DEOC and respective stakeholders in case of water release from the dams.
- Start their control room at the timeof monsoon.
- Follow the instructions mentioned with the Flood memorandum.
- To participate in the meetings, mockdrill/exercises and training.
- To prepare own detailed action plan to ensure the effective handling of different kinds of emergencies.

P) R&B Department

- To play vital role in pre, during and post form of emergencies.
- Pro per management of roads and buildings and timely maintenance of the same.
- Inform DEOC and respective stake holders' diversion of routes, closing status of the roads etc.
- Ensure safety terms while establishing or developing of bridges, dams, roads, buildings etc.
- To participate in the meetings, mockdrill/exercises and training.
- To prepare own detailed action plan to ensure the effective handling of different kinds of emergencies.
- Liaison with DEOC, Chairperson, emergency services organization, agency and other related person.
- Other duties as required during actual emergency.

CHAPTER-5

DISASTER SPECIFICACTION PLAN

FLOODS ACTION PLAN

As per the risk and vulnerability analysis of the district. Mahisagar has risk of floods in many area of district. The District has two major rivers viz. the river Mahi that flows across the Kadana, Lunawada, Khanpur and Balasinor Taluka and the river Panam flows across Lunawada Taluka through the district; more over to these, major water bodies like Kadana Dam, Panam Dam and Panam dam reservoir a real so the possible sites from where the risk of floods is possible.

The talukas of the district with major wards of the city are the possible sites which are either affected during the heavy rain fall or water logging or by water release from the dams or reservoirs.

Early Warning & Communication:

GENERAL TERMINOLOGY USED IN WEATHER BULLETINS

(A) Intensity of Rainf all Terminology Used

- 1. 0.1. mm to 2.4 mm (24 hrs)-----Very light rain
- 2. 2.5 mm to 7.5 mm ----- Light rain.
- 3. 7.6 mm to 34.9 mm ----- Light to Moderate rain
- 4. 35.0 mm to 64.9 mm ----- Moderate rain
- 5. 65.0 mm to 124.9mm------ Heavy rain
- 6. Exceeding 125 mm ------ Very Heavy rain.

(A) Special distribution of weather phenomenon Percentage Area Covered Terminology Used

- 1. 1 to 25-----(Isolated Places)
- 2. 26 to 50----(Few Places)
- 3. 51 to 75 ----(Many Places)
- 4. 76 to 100----(Atmost Places)

Page110

(C) Emergency Situation

- 1. When water level is rising above the danger of H.F.L
- 2. When intensity of rainfall is above 65 mm/hr
- 3. When breaches are anticipated and which may cause disaster
 - 4. When water levels are rising abruptly and which may cause disaster

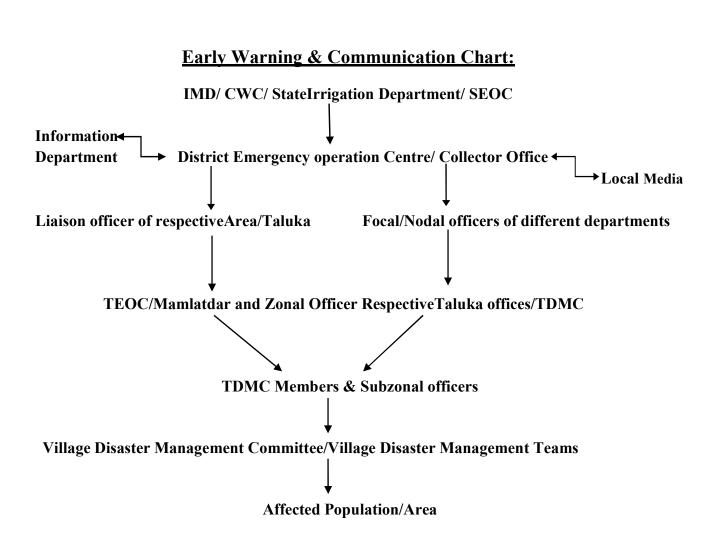
(D)Evacuation

- (1) WhiteSignal-Alert condition
- (2) Blue Signal-Ready for Evacuation
- (3) RedSignal-Immediate Evacuation

As and when the warning come from Indian Metrological department (IMD), or fromIrrigation department regarding heavy rainfall or water release the following channel has been intimated and appropriate message conveyed to the concerned department / official / controlrooms / community members using telecommunication, wireless message, by fax or in written by DEOC.

In city area the route has been finalized for early warning, accordingly early warning task force leading by fire brigade personnel, spreads the message of alert in respective low line areas, in villages local methodologies of early warning has been used (by beating up of drums etc.) to communicate the message of alert to the affected population of the village.

The following channel has been intimated and appropriate emessage conveyed to the concerned.



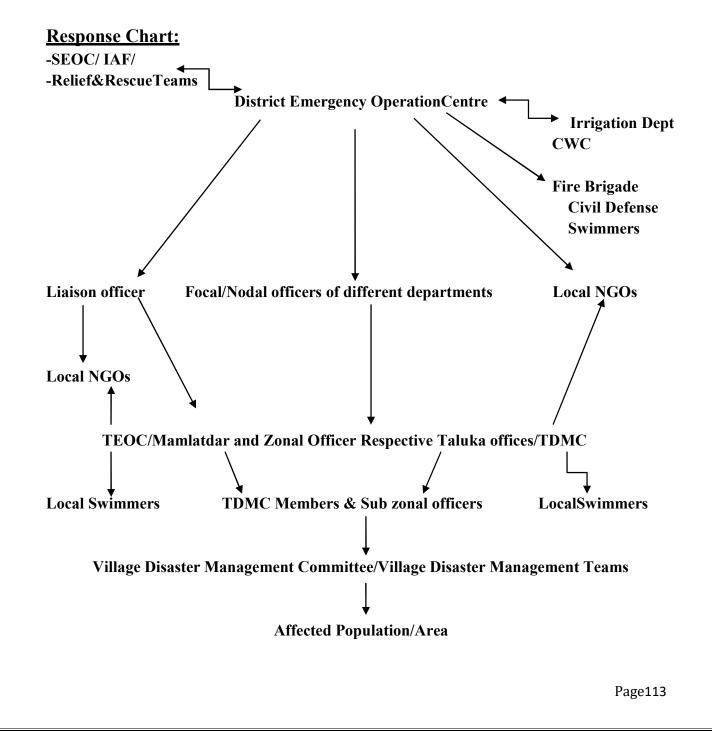
Response:

The response mechanism would be the same as describes with the general response mechanism chapter, here the focus will be on Irrigation department, administrative officials and the affected areas/population.

When early warning has been circulated the same department heads, focal officials and administrative heads will put their own DM plan into the action and the response activities will be carried out accordingly.

- As disaster declares the response managed and monitored through DEOC,
- All the concerned DDMC members along with the Liaison officers and response group members are intimated to respond to the situation as described in the below chart.
- As per the impact of disaster it will manage through DEOC / TEOC and if needed support of Stateor Central departments will be requested to deal with the situation.

- DM Plan of Irrigation Department, Flood memorandum, TDMP, CDMP and other
 DM Plan will be referred as anwhen it is required to respond in case of floods.
- The list of trained swimmers is incorporated with Annexures.
- Equipments for flood rescue like boats LifeJackets, Lifebuoys, Dewatering pumps etc.
- Database of SDRN and IDRN (Manually and Electronic) will be referred for flood response.



Post Emergency:

Focus will lie on Medical Treatment, Disease Control, Poison control, Reconstruction & Rehabilitation, Floodwater Removal, and Providing Relief—Clothing, Shelter, etc. to affected people, Damage Assessment, Funeral processes.

Temporary Shelter:

- For temporary shifting of affected persons, temporary shelters are used during the effect of floods.
- primary schools, Secondary/Higher secondary schools, Community hall, Colleges etc. as temporary shelter for flood affected persons and incorporated the same with their DM Plan which is used atthe time of floods.
- Primary/Secondary/Higher secondary schools, Colleges, Community hall etc. of taluka and villages are used as temporary shelter and the focal officer for the same is DEO and DPEO.

EARTHQUAKE ACTION PLAN

Mahisagar falls under zone-III according to the zoning map, that's why it can be possible that an earthquake between magnitudes of 4-5 can strike Mahisagar. But as there is fault line going through the District, earthquake of magnitude up to 7 can also strike and very high possibility offailure of various infrastructures and very high chances of risk of loss of live properties too in certain highly populated areas of the district.

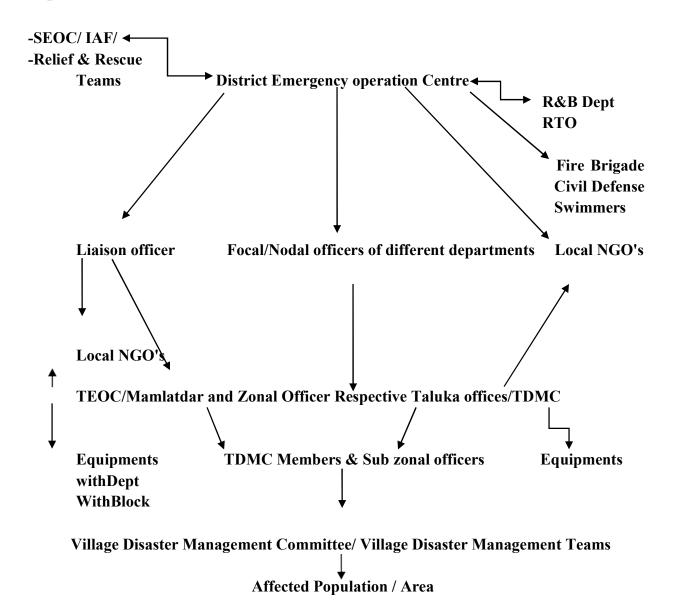
The respons emechanism would be the same as describes with the general response mechanism chapter, here the focus will be on well-populated areas in particular city areas and the District disaster response group.

- As disaster declares the response managed and monitored through DEOC.
- All concerned DDMC members with Liaison officers and response groupmem be rsareintimated to respond the situation as described in the below chart.
- As per the impact of disaster it will managet hrough DEOC/TEOC and if needed support of Stateor Central departments will be requested to deal with the situation.
- Departmental DM Plan of all concerned departments, TDMP, CDMP and other DM Page114

Plan will be referred as an when itis required to respond in case of Earth quake. Database of SDRN and IDRN (Manually and Electronic) will be referred for flood response.

ZONES	MAGNITUDE
Zone-V	Greater than 7
Zone-IV	Greater than 5, Less than or equal to 7
Zone -III	Greater than 4, Less than or equal to 5
Zone -II	Greater than 3, Less than or equal to 4
Zone- I	Less than 3

Response Chart:



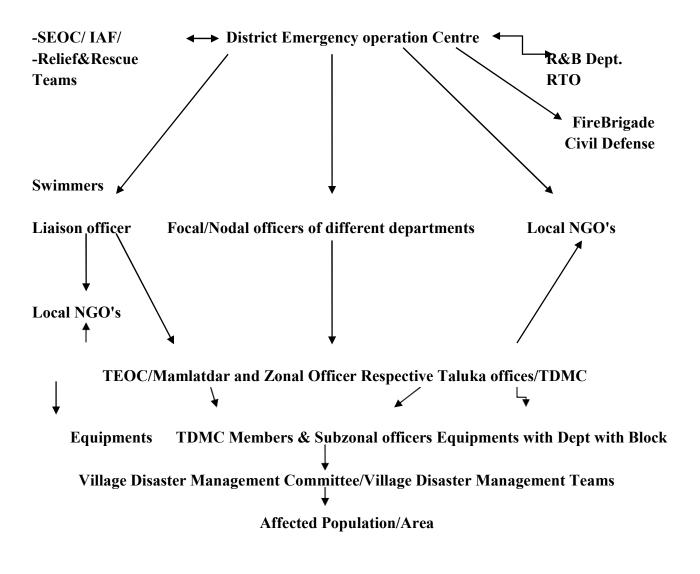
Temporary Shelter:

- For temporary shifting of affected persons, temporary shelter is used during the effect of earthquake.
- In city area, incase of devastating earth quake the temporary shelters available with DEOC (Tarpaulin sheet with iron blades) can beused, tents with forest and other department and caterers can also be used as temporary shelter
- None damaged / safe government establishments can also be used as per the directions of chair person.

CYCLONE ACTION PLAN

Mahisagar District has no ocean and the taluk as of the district with major wards of the city are the possible site which can be affected during the heavy wind flow. Majorly the flood action plan will be referred at the time of cyclone.

Response Chart:



Temporary Shelter:

- For temporary shifting of affected persons, temporary shelter is used during the effect of Cyclone.
- Primary/Secondary/Highersecondary schools, Colleges, Community hall etc.of taluka and villages are used as temporary shelter and the focal officer for the same is DEO and DPEO.

BIO LOGICAL DISASTER ACTION PLAN

Majorly the people of urban area residing in district is affected by various types of Vector born decease and Water born decease in particular during the monsoon season. Frequent epidemics, especially during monsoon are common aspect for Mahisagar district.

Mahisagar district is endemic various water-borne diseases such as Cholera, Leptospirosis and Malaria. Several relatively minor ailments such as Diarrhoea are more common during the monsoon. Most importantly, there is always a danger of epidemics breaking out after floods arising due to different factors – inundation of wells under contaminated sewage water, through such flooded water. There is contamination of groundwater as well as wellwater in such circumstances. Well water can be contaminated directly when sewage water enters the well during inundation.

Response:

Health department in particular Health department- District Panchayat, Mahisagar who will look after and respond such kind of disaster arising in Panchayat areas, such as taluka level and village level. Health department - District Panchayat has their own set of epidemics team and task force to respond in such kind of disaster, for sampling of the water, grains, food sample etc done by Laboratory of Food & Drug.

OIL SPILLS AND MINE DISASTERS ACTION PLAN:

State level action plan / department specific action plan / Industries specific action plan will bereferred at the time of the above stated Disasters. The response mechanism would be the same as describes with the general response mechanism chapter.

- As disaster declares the response managed and monitored through DEOC.
- All concerned DDMC members with Liaison officers and response group members are intimated to respond the situation.
- As per the impact of disaster it will manage through DEOC/TEOC and if needed support of Stateor Central departments will be requested to deal with the situation.
- Database of SDRN and IDRN (Manually and Electronic) will be referred for response.

TSUNAMI ACTION PLAN:

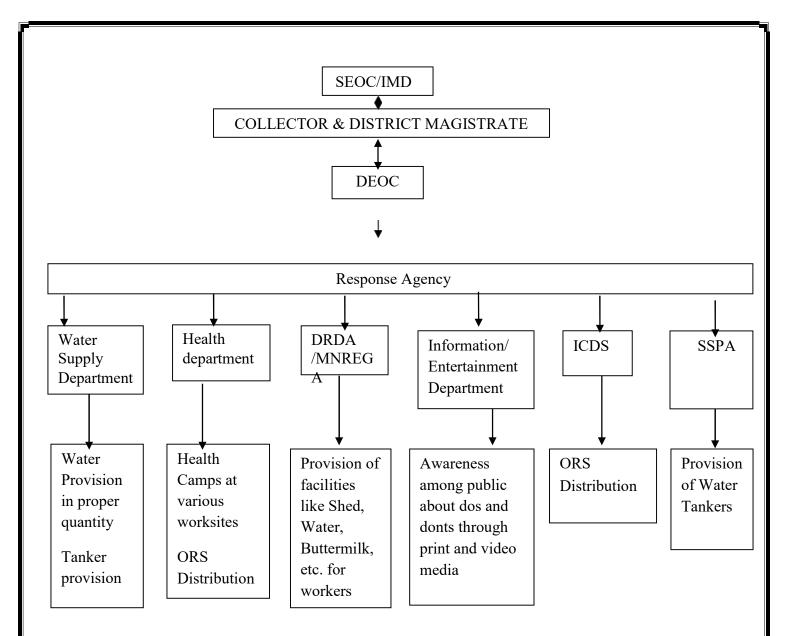
The possibility of the above stated disaster is very less with respect to Mahisagar District, but if the effect to fit is felt by the other district will accordingly respond as per the State directions.

HEAT WAVE ACTION PLAN:

Due to global warming effect, Heat Waves have become hazard for the humanlife. Though it cannot be called Disaster because according to Disaster's definition it does not fitinto the condition of harming infrastructure and precautionary measures and timely response arerequired to cope up with it. India Meterological department has started issuing different alerts forhightemperature which areas follows:

YellowAlert	41.1to 43.0 Degree Celsius
Orange Alert	43.1 to 44.9 Degree Celsius
Red Alert	Greater or Equal to 45 Degree Celsius

Keeping in mind the impact of heat wave on human life following roles and responsibilities has been given to various departments in order to reduce the impact of heat wave:



The above table represents the responsibilities of different Departments for various provisions that will help public reduce the impact on their health. In addition to that, DO's and DONT's for reducing the impact of Heat Wave, has been issued by Gujarat State Disaster Management Authority, Govt. of Gujarat which are as follows:

ગરમીમાં લૂ લાગવા (હીટ વેવ) થી બચો

આરોગ્યલક્ષી સુચનો

- * હીટ વેવ દરમ્યાન સુધી બહાર નીકળવાનું ટાળવું, આખું શરીર અને માથું ઢંકાઇ તે રીતે સફેદ સુતરાઉ ખુલતા કપડાં પહેરવા, ટોપી, ચશ્માં, છત્રીનો ઉપયોગ કરવો.
- * નાના બાળકો, સગર્ભા માતાઓ, વૃઘ્ધો તથા અશક્ત અને બિમાર વ્યક્તિઓએ તડકામાં વિશેષ કાળજી લેવી
- * સીધા સુર્ચ પ્રકાશથી બચો
- * ભીનાં કપડાંથી માથું ઢાંકી રાખો અવાર–નવાર ભીનાં કપડાંથી શરીર લૂછો વારંવાર ઠંડું પાણી પીવું
- # લીબુ શરબત, મોળો છાશ, તાડફળી અને નારીચેળનું પાણી, ખાંડમીઠાનું દ્રાવણ, ઓ.આર.એસ.વગેરે પુષ્કળ પ્રમાણમાં પીવા
- * બાળકો માટે કેસુડાનાં કુલ તથા લીમડાના પાનનો નાહવાના પાણીમાં ઉપયોગ કરવો
- * ગરમીમાં બહારથી ઘરે આવ્યા બાદ શરીરનું તાપમાન નીચુ આવે ત્યારબાદ જ નહાવુ, શક્ય હોય તો ઘરના બારી અને બારણા સાથે ખસની ટટ્ટી પાણી છાંટી બાંધી રાખવી
- * દિવસ દરમ્યાન ઝાડ નીચે, ઠંડક ઍને છાંચામાં ૨હેવું
- * બજારમાં મળતો ખુલ્લો, વાસી ખોરાક ખાવો નહી, બજારમાં મળતા બરફનો ઉપચોગ ટાળવો, લગ્ન પ્રસંગે દૂધ, માવાની આઈટમ ખાવી નહી
- * ઉપવાસ કરવાનું ટાળવું, સવારનું ભોજન ૧૨:૦૦ વાગ્યા સુધીમાં લઈ લેવું
- * ચા–કોફી અને દારૂના સેવનથી લૂ લાગવાની શક્યતા વધે છે, તેથી તેનું સેવન ટાળવું

ધ હીટ વેવની ચેતવણીના દિવસોમાં બપોરે બે વગ્યાથી ચાર વાગ્યા સુધી બહાર નિકળવાનું ટાળવું

લૂ લાગવા (હીટ વેવ) ના લક્ષણો

- * માથું દુઃખવું, પગની પીડીઓમાં દુઃખાવો થવો
- * શરીરનું તાપમાન વધી જવું
- * ખૂબ તરસ લાગવી
- * શરીરમાંથી પાણી ઓછું થઈ જવું
- * ઉલ્ટી થવી,ઉબકા આવવા,ચક્કર આવવા,આંખે અંધારા આવવા
- * બેભાન થઈ જવું
- * સુધ–બુધ ગુમાવી દેવી (Confusion)
- * અતિગંભીર કિસ્સામાં ખેંચ આવવી
- * વરીચાળી, કાચી કેરી, ગુલાબ, ખસ(વાળા), અને કાળી દ્રાક્ષનું શરબત લઈ શકાચ, રાત્રે ૧૦ નંગ કાળી દ્રાક્ષ પાણીમાં પલાળી સવારે આ પાણી પીવું અને દ્રાક્ષ ખાવી, તરબુચનો ઉપચોગ સવારે અને બપોરે કરવો.

લૂ લાગવાની અસર જણાય તો તાત્કાલીક નજીકના પ્રાથમિક આરોગ્ય કેન્દ્ર કે સરકારી દવાખાનાનો સંપર્ક કરવો.

🧶 ગુજરાત સરકાર દ્વારા જનહિતાર્થે

Page121

<u>CHAPTER-6</u> <u>LINKAGES WITH OTHER STAKE HOLDERS</u>

PARTNERSHIP AND LINKAGES WITH STAKE HOLDERS:

With respect to regular communication, all the departments and agencies including specificd epartments like office of:

- 1. Assi Director, DISH
- 2. Gujarat Pollution Control Board
- 3. Air Force
- 4. Off Site Control Room is in regular contact with District Emergency Operation Centre.

Regular Meetings of District Crisis Group (DCG) consisting various departments head has been conducted in every three months period in which various issues have been discussed regarding Chemical /Industrial hazards like..

- Potential of hazards in GIDCAreas.
- Mitigation steps to minimize the potential
- Regarding Awareness Generation Activities in Industrial Areas
- Training and Sensitization Programmes
- Regular onsite and Offsite Mockdrills
- Seminars and work shop with various loca lpartners (Village Panchayat & Associations)
- Availability of experts
- Availability of Anti dotes
- Escape routes
- Strengthening of Communication network

- Strengthening of resources
- Identification and validation of temporary shelters

ACADEMIC / SCIENTIFIC AND TECHNICAL ORGANIZATIONS:

There are many of the academic, scientific and technical institutions/organizations in Mahisagar district that are directly or indirectly concerned with Disaster Management Issues. For in stance:

- 1. Many of Fire Safety and Disaster Management institutions run in various parts of the district, mainly in Shahera Taluka which are focused on Fire Safety and Disaster Management Studies.
- 2. Health related institutions like Red Cross Society which are concerned with DM

MEDIA MANAGEMENT:

Majorly at the time of disaster the print as well as electronic media is managed by the chairperson himself or appoints the person of Dy. Collector rank to deal with media personnel. As per his direction the news or information shared with the media personnel from DEOC.

<u>CHAPTER-7</u> <u>RECOVERY MEASURES</u>

Disaster recovery is viewed by some people as a fight against nature to restore order in acommunity. However, the disaster recovery process is not a set of orderly actions triggered by the impact of a disaster upon a community. Rather, disaster recovery is a set of looselyrelated activities that occur before, during and after a disastrous event. These activities caninclude:

- Warning and Public Information
- Evacuation and Shelter
- Search and Rescue
- Damage Assessment
- Debris Clearance, Removal and Disposal
- Utilities and Communications Restoration
- Re-establishment of major transport linkages
- Temporary housing
- Financial management
- Economic impact analysis
- Detailed building inspections
- Re-development planning
- Environmental Impact Assessment
- Demolition
- Reconstruction
- Hazard mitigation; and
- Preparation for the next disaster.

Page124

Recovery has two phases i.e. Short term and Long term Recovery. Class I officers from various line departments are deputed as Liaison Officers for each Taluka, and they are responsible for monitoring and working with the local administration in both phases of recovery operations under the guidance of the District Collector.Search and Rescue, Damage Assessment, Public Information, Temporary Housing, Utility Restoration and Debris Clearance are essential elements of short-term recovery. The efficacy of their implementation affects long-term decisions.

Long-term recovery begins when a community starts to repair or replace roads, bridges, homes, and stores. It is also the period where improvement and changes are for the betterment of the society such as strengthening building codes, changing land use and zoning designations, improving transportation corridors and replacing –affordable housing stock, etc. Whether they are considered during pre-disaster planning or short-term postdisaster recovery, it is during thelong-term recovery period that most changes in preexisting conditions can and do occur. Changes that include sustained efforts to reduce loss of life and property from the next disaster, such as changes to building codes and land use designations are examples of mitigation.

1. Immediate and Short Term Recovery

While a preliminary damage assessment is carried out during disaster phase, a detailed assessment must be conducted before commencing reconstruction and rehabilitation activities. The relevant Government departments and local authorities shall initiate detailed assessment at their respective level for damages sustained in housing, industry/services, and infrastructure, agriculture, health /education assets in the affected regions. Immediate recovery can continue from a day to two months, depending upon the extent of damage.

Restoration of Basic Infrastructure

The restoration of basic infrastructure is to put the most essential infrastructure bank in place after the disaster.

a) Roads and Bridges

This covers construction of all critical roads and bridges necessary to provide connectivity with immediate effect. It can be National Highway or village roads to link with main roads and health centers, or construction / restoration of bridges that can be the only point of accessing Talukas & villages.

Responsible Department: R &B (State & Panchayat)

b) Drinking Water Supply

Restoration of Drinking Water supply has to be done by setting up of new hand pumps, tube wells or setting up of piped water supply in areas with no access to potable water. In case of floods, settingup of raised hand pumps is required. Responsible Department: Electricity Department & Watersupply Department

- c) Electricity: Restoration of power supply is also critical toi mmediate recovery. Responsible Department: Electricity Department
- d) Communication Network: Intimes of disasters, communication networks may be disrupted. The networks of mobile services providers have to be put back in operation at the earliest to make search and rescue easier, as well as to expedite coordinated response measures.

Responsible Department: BSNL & Mobile Service Provider, Electricity Department

e) Reconstruction & Repair of Lifeline Buildings

Life line buildings are those necessary to keep the administrative machinery functioning despite the damage by disaster. The following buildings haveto be repaired on priority:

- Collectorate
- Line Department Buildings
- Block Offices
- Hospitals

f) Rehabilitation

In case there is a major damage from earthquake or flooding, a large segment of the population may have to be rehabilitated to new locations on a temporary basis. There may be a need of permanent relocation in case of the change of river course. Communities will have to be supported with relief shelter.

g) Mass Care /ShelteringandHousing

The management of relief shelters is continued from the response phase to the immediate recovery phase and done through Incident Response System. The Incident Commander over sees the operations while the Relief Camp Manager manages the shelter. During this period, the number of victimsmustbe identified for whom construction of houses under Indira Aawas Yojna & Sardar Awas Yojna shall be sanctioned.

h) Food

Supply of food in relief phase is more important. It becomes important to elicit support from various NGOs, Grain merchants and volunteers.

i) Debris Removal and Disposal of Dead Bodies

We should remove debris or trees from transportation routes for effective rescue and relief measures. Dead bodies of humans and animals may be found in the debris and hence the Health&Animal Husbandry Department works in tandem with debris removal agencies.

j) Drainageand Sewage

Drainage and sewage systems will have to be quickly re-established to decrease in undation from floods, spread of diseases and epidemics and maintaining hygiene.

k) Health Care

First Aid and Emergency Health care has to be provided at the earliest. In case the health care centers are affected by the disaster, temporary medical relief camps need to be installed while the building is retrofitted or reconstructed. Reconstruction of buildings has to beginning this phase.

I) Livelihood Recovery

Page127

Livelihood interventions will happen over to three different over lapping phases, i.e.Livelihood Provisioning, Livelihood Protection and Livelihood Promotion. The first two phases shall form part of the Immediate & Short Term recovery, while the third shall from a part of Long term Recovery.

1. Livelihood Provisioning: Providing critical food and non-food items in the form of reliefis necessary for survival. This will focus on disbursement of food and health services for chronically vulnerable people during the emergency.

2. Livelihood Protection: Protect, replace and rebuild the productive assets needed to sustain a preexisting or new livelihood.

CASH DOLES: Some amount of cash assistance should be given for self-directed delivery by the victims. Individual loans and community block grants shall be extended to build local earning assets.

MATERIAL ASSISTANCE: In case where replacement of crucial assets or fresh requirement of some resources is crucial and not easily available in local markets, material assistance shallbe provided. For instance, distribution of seeds tofarmers can be done.

Mitigation Activities

As a part of conducting a detailed damage and loss assessment, an assessment of prospective risks and vulnerabilities will also have to bedone. For example, refurbishing of embankments or retrofitting of houses and other buildings.

2. Long Term Recovery

Long-term recovery must be complete in 2 months to 24 months time. (i) Housing Development of permanent housing solution for victims will happen during this period. (ii) The construction of houses for victims identified under Indira Aawas Yojana and Sardar Awas Yojna shall be undertaken during this time.

2.1. Reconstruction and Repair

a) Infrastructure

Restoration of social infrastructure has to be done to reinstate the normal functioning of district infrastructure. Schools & Hospitals will have to reconstructed and repaired in this recovery phase. Re-establishment of disrupted health care services will have to be done at the earliest.

Responsible Department for Hospitals: Health Department, R& B Responsible Department for Schools: Education Department

b) Economic Infrastructure

Restoration of economic infrastructure (Banks) is essential for accessibility of money and the smooth functioning of the economy of the district. Unless addressed, its everely affects the livelihood and employment potential of the district. Thus, bank buildings shall be quickly instated.

c) Livelihood Recovery

Final phase for livelihood recovery is a part of long-term recovery initiatives.

i) <u>Livelihood Promotion</u>: To initiate and strengthen livelihoods to be more economically and environmentally sustainable as well as more resilient to future disasters.

In this long term recovery effort, focus is on livelihoods diversification, creation of alternate income generating activities, providing financial services such as loans and insurance, and strengthening forward linkages with markets for existing and new livelihoods.

ii) <u>Micro finance Services:</u> Micro-credit (small loans) shall be provided to repair or replace critical livelihood assets, finance existing debts or for developing new livelihoods.

iii) <u>Micro-insurance:</u>Providing small-scale insurance at low premium for providing payouts on the occasions of emergencies. Insurance of livestock shall also be facilitated.

3. RESTORATION OF ESSENTIAL SERVICES AND INFRASTRUCTURE

The following tables are to be filled after an event of disaster:

POWER

Item/Services	No. of unit Damaged	No of villages affected	Population affected	Recovery measures	Implementing agency	Tentative Duration (Months)
Feeder						
Transformers						
HTLines						
LTLines						
ElectricPoles						

To be planned after initial damage assessment by departments.

HEALTH

	РНС	СНС	Sub	Drug	Recovery	Implementing	Tentative
	(village		Centre	Store	Measures	Agency	Duration
	name)						(Months)
No of buildings							
damaged							
No of heal thc							
entres							
inaccessible							
Refrigeration							
andother vital							
equipment for							
Storage							
Drugs and							
medicines							
No of Ambulance							
damaged							

To be planned after initial damage assessment by departments

SOCIAL

People in need of immediate rehabilitation including psychosocial support (due to disaster)

Village	Men	Women	Children	Total	RecoveryMeasures	Implementingagency	Tentative Duration(Months)

ROAD AND TRANSPORT

Road Damage	Location	Severity	Km	Recovery Measures	Implementing Agency	Tentative Duration (Months)
Panchayat						
State Roads						
National Highway						
Nagar Palika						

ROAD AND TRANSPORT

	Village/ Ward	Population	Alternate	Recovery	Implementing	Tentative
			road/route	Measures	Agency	Duration
						(Months)
Road Cut off						
Rail						
Connectivity						

COMMUNICATION

Туре	Office/ Tower Damaged	Villages affected	Recovery Measures	Implementing Agency	Tentative Duration (Months)
Landline connectivity	(No.of unit And location)				
Mobile connectivity					
Wireless Tower					
Radio					

WATER SUPPLY

Туре	Village	No. of	Faliya/	Recovery	Implementing	Tentative
		unit	Population	Measures	Agency	Duration
		affected	affected			(Months)
Well						
Borewells						
Pond						
Water Supply Disrupted						
Contamination						
ESR damaged						
GLRDamaged						
Sump damaged						
Pipelines damaged						
Stand post damaged						
Cattlet rough						
Damaged						
Hand pump						

FOOD SUPPLY

List of village affected by disruption in food supply

Туре	No. of godown damage	Type of grains per ished (Ton)	Qty of grain perished (Ton)	Qty of grain at risk (Ton)	Recovery Measures	Implementing Agency	Tentative Duration (Months)
Civil Supply							
АРМС							
Other							

HOUSING

Partial Damage			Recovery Measures	Prog /Scheme	Implementing Agency	Tentative Duration	
Kucha	Pucca	Kucha Pucca					(Months)

PUBLIC UTILITIES

Public Buildings	Partial damage (No. of units)	Fully Damaged/ Collapsed (No. of Unit)	Recovery Measures	Prog/ Scheme	Implementing Agency	Tentative Duration (Months)
Panchayat						
Educational Buildings						
Anganwadi						
Hospitals						
Office Buildings						
Market						
Policestation						
Community Halls/ Function plots						

4. **RESTORATION OF LIVELIHOOD PROVISIONING OF EMPLOYMENT**

Occupational category	No. of	Implementing	Tentative Duration
	workers	Agency	(Months)
Skilled labours			
Unskilled and, Agricultural labours			
Small and marginal farmers			
Construction workers			
Salt pan workers			
Fisher folk			
Weavers			
Other artisans			

LAND IMPROVEMENT

Land erosion/ siltation (Hectare)	Affected (Hectare)	Recovery Measures	Implementing Agency	Tentative Duration (Months)

AGRICULTURAL

Crop failure (Hectare)	Affected (Hectare)	Recovery Measures	Implementing Agency	Tentative Duration (Months)

NON-FARM LIVELIHOOD

Cattage	Extent of damage/disruption			In the section of the	Tentative
Cottage Industry	Tools and equipment (Specify no.and type)	Goods and material (Specify type and qty)	Recovery Measures	Implementing Agency	Duration (Months)
Hand loom					
Pottery					
Food					
Processing					
Diamond					
Sorting					
etc					
Printing/					
Dying					
Other					

SHOPS AND ESTABLISHMENT

	Extent of damage/disruption			Implementing Agency	Tentative Duration (Months)
Building (No. and location)	nd equipments (Specify (Specify type and qty)				

ANNEXURE-1 DISTRICT PROFILE

MAHISAGAR:

Mahisagar district is a District in the state of Gujarat in India that came into being on 26 January 2013, becoming the 28th district of the state. The district has been carved out of the Panchmahal district and Kheda district.Lunawada is the district headquarters of Mahisagar. It started its operation in full-fledged from 15 August 2013.

Mahisagar District is named by having Mahisagar River. As per 2011 cencus the district has total population of 9,94,624 and a Total Area 2,26,064 hactor. The District has 3 towns spread over 6 talukas.

The Mahi River which flows from East to West, is a holy river of India, is worshipped by many people due to lots of temples and holy places of worship along its shore. Mahisagar is the name given to it due to its vastness. The 28th newly formed district called Mahisagar district in Gujarat observes its name from this holy river . Kaleshwari is the famous place in Lunawada holding historical importance. Favourable conditions of Vasad make it a favorable picnic spot and are a gateway to 'Charotar'. Its ancient name is 'Vasudhanagari'. Mahidam dam near Banswara in Rajasthan is built on River Mahi, from which whole Gujarat gets the drinking water. Many crocodiles, aligators, take shelter in it. Lunawada of Mahisagar district has Tirupati oil industries, Balaji food industries, Groundnut oil industries are major sources of employment for peasants' of Vadodara, Sabarkantha district and Panchmahal.

The district is situated in eastern part of Gujarat state at 22' – 23'North Latitude and 73'-74' East longitude. The district is surrounded by Rajasthan State and Arvalli District of Gujarat in the North Kheda district and in the west Chhotaudepur District and part of Madhya Pradesh State in North attitude of district.

Location:

Sorronding District:

North Side	:	Aravalli District, Rajasthan State.
South Side	:	Panchmahal District.
East Side	:	Dahod District, Madhya Pradesh.
West Side	:	Kheda Districts.

Page140

The Mahisagar district can be divided in the two main physiographic sub-divisions. The entire Northern and Eastern portion comprising mainly of Kadana, Santrampur Talukas are covered by hilly and forest area. The rest of the part is covered by plain cultivated land.

Physiography and Climate:

The district experience climate condition ranging from 12'c in the winter (December to January), to 43' c in summer(March to May). The total rain-fall varies from 389 to 1584 mm in the different part of the district. Monsoon starts by end of the June and last up to the end of the September. There are occasional showers in October.

Humidity average		: 50 to 90%
Summer 60 to 75 %	min	: 50 to 65 %
Winter 65 to 80%	min	:60 to 70%

Ecological Condition:

RIVERS:

The District is traversed by five perennial rivers like Mahi Sagar, Panam. About 386.22 sq. Kms.(17% Land) is covered under forest. There are several medium and major irrigation projects are Kadana, Bhadar, Panam.

The area of the District is covered under irrigation mainly thoroughly wells and irrigation tanks, Drought occurs in the District at alternate year.

Economic Condition:

Tribal area Most of the population are labors and lower middle class and 20 % are below poverty rate are observed. They are living in scattered little houses and main income sours is labor. They are migrated from North part till Delhi, East at Assam, and in South till Madras. Several scheduled tribes inhabits in Kadana, Santrampur.

75% of the population is farmer and agricultural labors. Due to irregular rain and traditional agricultural patterns their economic condition are not as good as per other district of Gujarat. Most of the agricultural labors are migrated in search of labor works for their live hood to nearby district and state.

Adivasi Staying in tribal areas are Bhills, Naiks, Patelia, and Other. Adivasi women weres

Page141

ornaments of silver and Kathir, Adivasi women are fond of putting black spots on their chicks and leaps. Their Cloths are not fully covered so they have more chances of mosquito bites.

Most of the labors are working at construction sites and road construction work. Their living habitat is not so good, they stating at raw houses at the site and resting in open uncovered, unprotected sites so they carried most of the malaria parasite load from outside of the district to Mahisagar.

They celebrate Diwali, Holi, Dashera, and Amliagiyaras at their natives. So in that season malaria parasites are detected in ill persons. They give "Bali"(Hens and Goats) to the Devi & Devtas. They walk on fire in Chlmela etc. those enjoying fairs and festivals. We are educating them at that time with IEC stall at fair site.

Adivasis of Mahisagar are staying in farms and Jungle. Houses are made of mud and plastered by mud gobar roof is covered by Tad-Patta using bamboo and wood. They brought drinking water from nearby well, rivers, steam. Due to fear of wild animals and thieves they kept their animals inside of the house. They sleep on grass bed on Khatia. So they are suffered much from mosquito bites.

District Profile:

Population of District:

According to the census of 2011, the total population of the district is 9,94,624.

Municipality-wise population in the district as per 2011 census .

Serial No	Municipality	Male	Woman	Total Population	Population rate	km .sq
1	Lunawada	19,166	17,788	36,954	928	12.77
2	Santrampur	10,066	9,399	19,456	934	39.75
3	Balashinor	20,282	19,048	39,333	959	16.00
	Total	49,514	46,235	95,743	-	68.52

Taluka wise population is as follows.

Serial .no	Taluka	Male	Woman	Total population	Population rate
1	Balashinor	75,480	70,343	1,45,823	932
2	Kadana	66,399	63,146	1,29,545	951
3	Khanpur	49,023	47,018	96,041	959
4	Lunawada	1,32,444	1,24,784	2,57,228	942
5	Santrampur	1,35,856	1,29,838	2,65,694	956
6	Virpur	51,742	48,551	1,00,293	938
		Total		9,94,624	946

• The urban/rural population is as follows.

Sr. No	Area	Population	Skm .q
1	Urban Area	95,743	68.52
2	Rural Area	8,98,881	2192.12
	Total	9,94,624	2,260.64

The district comprises the following taluka-villages.

No.Sr	Name of Taluka	Village No
1	Balashinor	47
2	Kadana	136
3	Khanpur	86
4	Lunawada	243
5	Santrampur	153
6	Virpur	52
Total		717

Sr No	Name of Taluka	Rain	Rain	Rain	Rain	Rain
		2019	2020	2021	2022	2023
1	Balashinor	955	597	423	827	962
2	Kadana	811	647	752	999	709
3	Khanpur	973	691	349	500	570
4	Lunawada	834	821	532	843	1281
5	ampurSantr	687	657	698	1075	1057
6	Virpur	809	728	436	712	1195
T otalRa	unfall	2888	5069	4141	3190	5774
Total Av	erage Rainfall	481.3	844.8	690.1	531.6	962

• Details of rainfall recorded in the district during the last five years.

• DETAILS OF MAJOR DEMONS AFFECTING DISTRICT:

affected in Mahisagar district maThere are mainly three d .the details of which are as follows

Sr.No	Name of theDam	(ft)Maximum Reservoir Surface	MaximumR eservoir S(meters)urface
1	Kadana Dam	419	127.71
2	Panam Dam	418	127.41
3	Bhadar Dam	405.90	123.72

ANNEXURE-2

HISTORY OF DISASTER

Details of disasters that occurred in Mahisagar District During Last Few Years

<u>Earthquake :</u>

year	severity	Number of villages affected	Human death toll	Number of animal deaths	Loss of property	Economic in)loss (lakhs
2023	0	0	0	0	0	0

Flood:

Date	Cause and origin of crisis	Number of villages affected	Number of affected families	Human death toll	Animal death toll	Partly damaged building		A total loss building	
1973	Heavy rains in the	27	3375	-	-	Kaccha	Pucca	Kaccha	Pucca
	uplands					1336	78	7	0
2013	Heavy rains in the dsuplan	6	83	-	-	0	0	0	0
2017	H eavy Rain	0	0	2	8	1067	0	12	1
2018	H eavy Rain	0	0	4	10	2	0	0	0
2019	H eavy Rain	0	0	1	6	0	0	0	0
2020	H eavy Rain	0	0	0	17	33	0	0	0
2021	H eavy Rain	0	0	1	4	0	0	0	0
2022	H eavy Rain	0	0	4	15	180	0	3	0
2023	Heavy Rain	10	6	0	28	1214	7	22	0

Cyclone

Date	Cause and origin of Crises	Number of villages affected	Number of affected families	Human Death toll	Animal Death toll	Partly damaged building		A total build	
						Kaccha	Pacca	Kaccha	Pacca
2013	Heavy rains in the uplands	6	83	0	0	0	0	0	0
-05-18 2021	Thunderstorm	0	84	0	1	83	0	1	0

Lightening :

During the Last Few Years in the District, the Followig conditions have resulted in Loss of Life and Infrastructure due to Lightening.

Year	Total	Total human casualties	casualties Total animal
2015	1	0	3
2018	4	1	6
2019	5	0	5
2020	10	0	15
2021	4	1	4
2022	11	1	11
2023	9	0	11
:Total	44	3	55

Heat Wave :

During the Last Few Years in the District, the Followig conditions have resulted in Loss of Life and Infrastructure due to Heat Wave.

Year	Make a total	Total human casualties	Total animal casualties
2023	0	0	0
-: Total	0	0	0

ANNEXURE - 3

DAM WATER RELEASE MANAGEMENT :

When water is released from Kadana dam out of total 717 villages of the district, 63 of Lunawada taluka , 27 of Kadana taluka , 16 of Khanpur taluka are affected.

When water is released from Panam dam in Panchmahal district, total 22 villages including 18 of Lunawada taluka and 4 from Santrampur taluka are affected.

Similarly, when water is released from the Bhadar dam in Mahisagar district, a total of 8 villages including 7 from Khanpur taluka and 1 from Kadana taluka are affected.

When Water released from the Dam, District Administration received Alert Information from the Respective Dam Division and at the Same Time District Control Room, Concerned Taluka Liasion Officer, Mamlatdar Shri, Taluka Development Officer, Police Department, Road and Building Department etc are also get Alert Message.

At a Point Following Quantities of Water released Kadana Dam, the Numbers of Following villages are affected:

- 1. White Signal Alert
- 2. Blue Signal Ready for Evacuation
- 3. Red Signal Immediate Evacuation.

Sr. No	Volume of water to be released from dam (In Cusecs)	Name of Taluka affected	Number of villages	White Signal	eBlu Signal	Red Signal
1	1,77,500	0	0	0	0	0
2	1,77,500 to 1,99,170	Lunawada	3	3	0	0
3	1,99.170 to 2,66,000	Lunwada	3	3	0	0
4	2,66,000 to 3,53,000	Lunawada Khanpur Kadana	3 5 27	3 5 27	- - 6	- - -
5	3,53,000 to 7,30,000	Lunawada Khanpur Kadana	3 5 27	3 5 27	- - 6	- - -
6	7,30.000 to 10,50000	Lunawada Khanpur Kadana	64 16 27	0 0 0	59 16 27	5 - -

7 More 10,50,000than	Lunawada	64	0	-	64
	Khanpur	16	0	-	16
	Kadana	27	0	-	27

At a Point Following Quantities of Water released Panam Dam, the Numbers of Following villages are affected:

Sr.No	Volume of water to be released from dam (In Cusecs)	Name of Taluka affected	Number of villages	White signal	Blue signal	Red signal
1	1,50,500	0	0	0	0	0
2	1,50,000 to 2,80,000	Santrampur Lunawada	4 18	4 18	0	0
3	2,80,000 to 3,50,000	Santrampur Lunawada	4 18	0	4 18	0
4	3,50.000 to 3,93,000	Lunawada Santrampur	18 4	0	0	18 4

Details of bridge leading to submergence releasing water from Kadana Dam :

When excess water is released from the Kadana Dam, the bridges detailed below are submerged.

Sr No	Detail of bridge in Mahi River	Distance from Kadana Dam (In Km)	Impact Discharge (In Cusecs)
1	Ghodiyar Bridge	1.50	11,00,000
2	Tantroli Bridge	14.00	3,00,000
3	Madhwas Bridge	35.00	12,50,000
4	HadodBridge	46.00	10,00,000
5	Agarwada Bridge	55.00	12,50,000

LIST OF FLOOD AFFECTED TALUKA'S RIVESIDE VILLAGES FROM KADANA DAM

Lunawada Taluka

Sr.No	Village Name	Sr.No	Village Name
1	Thana Sawli	18	Kacchotiyana Muvada
2	Rabadia	19	Juna Karva
3	Tintoi	20	Maliya
4	Madhwas	21	Dholi
5	Bhamra	22	Morai
6	Limbodra	23	Sadhakpur
7	Pattan	24	Kidiya)V(akhatpur
8	Kankchiya	25	Khempur
9	Ladvel	26	Panampalla
10	Kharol	27	Valinath
11	Fatepura	28	Chuwan naMuwada
12	Kothamba Palla	29	Kidiya
13	Guvalia	30	Hadod
14	Charangam	31	Kolwan
15	Agarwada	32	Meghwada
16	Savli Dalwai	33	Simaliya
17	Champli	34	Sada

35	Ghantiyada	53	Nani Charel
36	Rajgadh	54	Moti Charel
37	Nana Vadadala	55	Bamanwad
38	Hada na Muvada	56	Verama
39	Hindoliya	57	Dokelav
40	Goal na Palla	58	Vanka
41	Taktaji na Palla	59	Motighoda
42	Kaka na Bhesawada	60	Dockelia naM uv
43	Semra naMuwada	61	Salawada
44	Chandpur	62	Aritha
45	Gadhanpur	63	Kotha
45	Mahudiya		
47	Waghji Baria na Muwada		
48	Jharkhwada		
49	Chopada		
50	Chansar		
51	Ambali Muvada		

ada

52 Mota Dokva

Kadana Taluka

Sr.No	Village Name	Sr.No	Village Name
1	Vagdia ni Andhari	15	Ghodiyar
2	Charan ni Muwadi	16	Agarwada
3	Chopad Devi	17	Waghdungari
4	Mal	18	Macchi na Nadhra
5	Balujina Muvada	19	Dedawada
6	Nana Rajanpur	20	Anoppur
7	MotaRajanpur	21	Khatva
8	Diwada	22	Ladu Damor na Vanta
9	Kadana	23	Munpur
10	Thakorna Nadh ra	24	Antalwada
11	Dadhaliya	25	Near)Math Mal(
12	Kharawada	26	Velanwada
13	Tantaroli	27	Dodia

14 Padmaji na Muvada

Khanpur Taluka

Sr.No	Village Name	Sr.No	Village Name
1	Dolariya	9	Zara
2	Nana Khanpur	10	Mudavadekh
3	Rehman	11	Virpara na Muwada
4	Mena	12	Kanesar
5	Bamroda	13	Jher
6	Sampadiya	14	Bhuwabar
7	Patapur	15	Naroda
8	Dolatpur	16	Ghoghwada

Ξ

LIST OF FLOOD AFFECTED TALUKA'S RIVESIDE VILLAGES FROM PANAM DAM

nawada TalukLua

Sr.No	Village Name	Sr.No	Village Name
1	Chopada	10	Jamapagi na Muvada
2	Verma	11	Chansar
3	Nathuji naMuwada	12	Undara
4	Nava Muwada	13	Kena Bariya na Muwada
5	Ghantaw	14	Lunawada
6	Motighoda	15	Jasingpur
7	Dokelav	16	Medjio na Mu wada
8	Panam Palla	17	Doklia na Muwada
9	Amli muwada	18	Nani Charel

Santrampur Taluka-:

Sr.	Village N	ame Sr		Village Name
1	Amaliyat		3	Nan Salai
2	Jotangia		4	Rajbari

LIST OF FLOOD AFFECTED TALUKA'S RIVESIDE VILLAGES FROM PANAM DAM

Khanpur Taluka and Kadana Taluka

Sr.No	Village Name	Sr.No	Village Name
1	Khanpur	5 Rehman	n
2	MotaKhanpur	6 Bhadro	d
3	Nana Khanpur	7 Karanta	a
4	Mena	8 Ankliya	ı (Kadana)

ANNEXURE - 4

DETAILS OF EQUIPMENTS AVAILABLE IN THE DISTRICT

Taluka		Details of Equipments								
	Life Jacket	Life Ring	Rope (feet 100)	Rope (Feet 200)	Generator					
Lunawada	13	20	01	02	1					
Khanpur	10	10	01	01	1					
Kadana	2	2	01	01	1					
Santrampur	04	24	03	00	1					
Balasinor	20	20	01	01	1					
purVir	10	10	02	00	1					
Aapda Mitra	42	00	00	00	0					
Total	101	86	09	05	6					

Following Search and Rescue Equipments are available in District.

Muncipality		EQUIPMENTS DETAILS OF							
	Life	Life	Rope	Generator	Emergency	Fire	Fire	Water	
	jacket	Ring			light	Bullet	Tender	Bowser	
Lunawada	10	10	2	0	2	1	1	1	
Santrampur	2	2	0	0	2	1	1	1	
sinorBala	4	4	3	0	1	1	1	1	
DEOC	2	2	0	0	3	0	0	0	
Total	18	18	5	0	8	3	3	3	

Name of Municipality	Name of Equipment/Vehicle	Condition of Equipment/	Quantity (in Nos.) (Refer Annexure-1 & Indicate the available quantity as of now)	Custodian/ Responsible Officer
Lunawada	Portable Inflatable Emergency Lighting Systems	Working	02	Chief Officer- Shri Naresh Muniya
	Mini Fire Tender	Working	01	9909973918
	Water browser	Working	02	02674 250006
	Motor-cycle Mounted Water Mist	Working	01	
	Life Jacket	10	10	
	Life Bouy	10	10	
Santrampur	Portable Inflatable Emergency Lighting Systems	Not Working	02	Chief Officer- Shri Dipsinh Hathila
	Mini Fire Tender	Working	01	9724111001
	Water browser	Repair work	01	02675-220055
	Motor-cycle Mounted Water Mist	Working	01	
	Life Jacket	2	2	
	Life Bouy	2	2	
Balasinor	Portable Inflatable Emergency Lighting Systems	Not Working	01	Chief Officer Shri AK Patel 9328539034
	Mini Fire Tender	Working	01	02690-266188
	Water browser	Working	01]
	Motor-cycle Mounted Water Mist	Not Working	01	
	Life Jacket	Working	04]
	Life Bouy	Working	04	

HEALTH:

TRANSPORTATION

		Vehicle On Road					
Sr. No.	Institution	Ambulance with Ventilator	Ambulance without Ventilator	Total	Other Vehicle	Total	
1	РНС	0	28	28	0	28	
2	СНС	0	11	11	0	11	
3	SDH	0	3	3	0	4	
4	DH	0	4	4	0	4	
5	Medical College		NO AVAILA	BLE			
6	108	2	13	13	0	13	
7	NGOs (KMG HO.)	0	2	2	0	2	
8	Private Hospital	0	4	4	1	5	
9	Other	0	0	0	0	0	
10	SANJIVNI RATH	0	2	2	0	2	
11	KHILKHILAT	0	1	1	0	1	

BED STRENGTH

S No	Facility Type	Total Number of Beds in the facility	Number of Isolation Beds (Total)	Number of O2 supported Isolation Beds (Total)	Number of ICU Beds (Total)	Number of beds with Ventilators (Total)
1	SDH/DH	140	40	50	3	3
2	СНС	195	86	78	0	0
3	РНС	236	188	183	0	0
4	Private	420	167	106	56	12
5	HWC	107	0	0	0	0
	Total	1098	481	417	59	15

Key Equipments

				No of Insti	ument av	ailable at	Institute		
Sr. No.	Name of Equipment	Medical College	District Hospital	Municipal Hospital	SDH	снс	РНС	Trust Hospitals KMG Hospital Balasinor	Private Hospital
1	Ventilator		38		0	0	0	1	0
2	O2 Cylinder-Jumbo D- Type		64		44	49	58	48	103
3	O2 Cylinder-B-Type 10Ltr	5	40	5	30	8	30	8	55
4	Enchotrachal tube	RIC	1	TR	0	0	0	1	39
5	Laryngoscope		1	DIS	1	0	0	2	39
6	Defibrillator		1	AR	1	0	0	1	0
7	Refrigerator	B	0) d	3	5	35	20	26
8	Lagrange Mask Airway	SAI	2		1	0	0	9	26
9	Ambu Bag	I I	1	AF	4	5	3	3	26
10	PPE (Personnel Prevention Examination) Kit.	ANY MEDICAL COLLAGE IN MAHISAGAR DISTRICT	400	ANY MUNICIPALHOSPITAL IN MAHISAGAR DISTRICI	100	5	2400	1	13
11	Pulse Oximeter	U U	15	AL	20	24	550	5	78
12	ECG Machine	BA	2	LId	2	0	0	5	18
13	Endotracheal tube		7	IOS	0	0	0	2	13
14	Statures	Ŭ	8	ALH	4	10	35	4	15
15	Vehicle Chair	CA	5		6	10	35	7	15
16	Pulse Monitor	I III I	14		0	5	0	4	26
17	Cervical Collar	Σ	0		0	0	0	2	0
18	Long Spring Board	≿	0		0	0	0	1	26
19	N – 95 Masks	V	3791	AN	3196	1870	5850	5	0
20	Autoanalyser	P N	0	ON N	0	0	0	2	2
21	X – ray Machine		2		2	0	0	1	5
22	Generator		1		2	5	33	1	26
	Other(if any pls specify)		0		0	0	0	0	0

Ambulance

No.	Place	Address	Ambulance Contact Number
Mr.B	aldev Rabari - 108 Man	ager	8238088615
Mr.D	ushayant Pandya- 108 l	9601303431	
	Batakvada	Ukhareli Panchayat	6357422927
2	Vadagam	Vadagam, PHC	6357422923
3	Vadadhari	Vadadhari PHC	6357422924
4	Godhar	Chuthana Muvada CHC	6357422926
5	santrampur	State Hospital (ALS)	6357422921
6	Balasinor	Balasinor REST HOUSE(ALS)	6357422919
7	Virpur	Virpur CHC	6357422917
8	Lunawada	Viraniya	6357373047
9	Kothamba	Kothamba CHC	635422918
10	Pandva	Dev crossing , Ami petroleum	6357422925
11	Kadana	Divda colony	6357422914
12	Ditvas	Diva's CHC	6357422908
13	Lunawada	Dh Hospital (ALS)	6357422920
Mahis	sagar khilkhilat		
1	Lunawada	General Hospital, Lunavada	7433975787
Mahis	sagar MMU and MHU		
1	Santrampur	State Hospital Santrampur	7433975605
2	Kadana	CHC Kadana	7433975652

Private Owner Equipment List

Sr.No	s Name'Owner	Mobile no	Equipments				
			Dumper	Loader/JCB	Shovel	Spade	
1	Shri Kalpeshbhai J	9725908143	-	1	30	10	
	Patel						
2	Shri Sagarbhai Bariya	8141156403	-	1	10	05	
3	Raj Construction	6355276751	1	1	20	10	
4	Shaileshbhai L Patel	9924276921	-	1	15	15	
5	Coinside infrastructure	7698889868	1	1	25	10	
6	Shivam Construction	9725026214	23	4	70	56	
7	Gayatri Construction	8980039785	15	3	23	18	
8	Shri H R Patel	9427077012		1	15	25	
9	Shri Sunil Patel	9825025523	-	1	10	10	
10	Shri V H Patel	9825234232	1	2	10	10	
11	Shri Bhumiraj A Solanki	8758868800	-	1	15	15	
12	Shri Ketul P Patel	9879779803	-	1	10	10	
13	Samarpam	9898967291	1	2	25	30	
	Construction						
14	Bhuptani Associates	9276767575	1	1	10	10	
15	Chimanbhai S Patel	8758142241	1	1	10	10	
	Total		44	22	298	244	

·									
		Facility in Number							
Sr. No	Taluka Name	/Axe Dhariya / Cutter	/tricuspid Shovel	Chain Hundred	the rope	/uniform jacket	walkie /talkie Hand set	Human Force	other
1	Lunawada	4	4	1	2	0	0	7	0
2	Kadaana	6	5	0	0	0	0	10	0
3	Virpur	2	2	2	0	2	0	6	0
4	Santrampur	0	2	4	2	2	0	6	0
5	Khanpur	7	6	1	2	0	0	6	0
	Total	11	10	8	6	4	0	35	0

Facility /Equipments available with Forest Department.

<u>ANNEXURE- 5</u> AAPDA MITRA AND SWIMMERS

List of Aapda Mitra Volunteers Mahisagar-2019

Sr.No	Aapda Mitra	Village	Taluk	mobile no	Remarks
1	Bipinbhai Rambhai Rawal	Hardaspur	Lunawada	8154987393	
2	Jignesh K Rawal	Hardaspur	Lunawada	9638182181	
3	Narendrabhai Amarabhai Rawal	Ranpur	Lunawada	8980546643	
4	Hirenbhai Kalubhai Ranpura	npurRa	Lunawada	9510409230	
5	Mangalbhai Rupabhai Talar	Godaria	Lunawada	8140848860	
6	Vishnubhai Dineshbhai Patelia	Panampalla	Lunawada	9898293277	
7	Dineshbhai Maganbhai Pargi	Janavad	Santrampur	6355565793	
9	Ganapatbhai Narsingh Damor	Surpur	rSantrampu	8141495612	
10	Kalpeshbhai Motibhai Katara	scratched	Santrampur	7572918875	
11	Ramanbhai C Macchi	Prathampur	Santrampur	9727344516	
12	Shaileshbhai Devabhai Pargi	Janavad	Santrampur	6352140946	
13	Chandubhai Pujabhai Damor	Amthani	Kadaana	8141981332	
14	Navinbhai Motibhai Machhi	Machhi na Nadra	Kadaana	9512177787	
15	Ashwinbhai Jagabhai Machhi	Rajanpur	Kadaana	8320292627	
16	Shanabhai Mangalbhai Wagdia	Buchawada	Kadaana	9727409534	
17	Amartbhai Shanabhai Wagdia	Buchawada	Kadaana	8238355561	
18	emchandbhai Shanabhai Pr Wagdia	Kureta	Kadaana	8758162501	
19	Nareshbhai Bhulabhai Solanki	Bakor	Bakor	9537995395	
20	Krishnasingh Indrasingh Solanki	Bakor	Bakor	9712450790	
21	Hiteshkumar Babubhai Chamar	Bakor	Bakor	9913462429	
22	aRitaben Udabhai Maliwad	Bakor	Bakor	7693816952	
23	Bhavnaben Babubhai Maliwad	Bakor	Bakor	9909077696	
24	Vinubhai Phulabhai Thakor	Virpur	Virpur	9316153849	
25	Rajeshbhai Sardarbhai Thakor	Virpur	Virpur	8238738628	
26	Sureshbhai Kalubhai Solanki	Virpur	Virpur	8238738628	
27	Sangitaben Mohanbhai Thakor	Virpur	Virpur	7567132827	
28	Varshaben Navneetbhai Baria	Virpur	Virpur	9727580178	
29	Arunaben D Khant	Virpur	Virpur	9727906867	
30	Kankuben Waghabhai Pagi	Kothamba	Kothamba	7283951544	
31	Jainbaben Fakir Muhammad Khatki	Kothamba	Kothamba	7572817101	
32	Mushtaqbhai Dashwatbhai Malek	Kothamba	Kothamba	7096594495	
33	Mobin M Malek	Kothamba	Kothamba	7874562867	

34	Babubhai JethabhaiVankar	Kothamba	Kothamba	9978579615
35	Shanabhai Waghabhai Pagi	Kothamba	Kothamba	9638172354
36	Ramanbhai Vechatbhai Dhama	Balasinor	Balasinor	8980465879
37	Kiritkumar Rameshbhai Chauhan	Kesharpura	Balasinor	9726541219
38	Narendrabhai Nanabhai Thakor	Sutariya	Balasinor	9879097153
39	Ajitbhai Jasingbhai Thakor	Sutariya	Balasinor	8140996171
40	Mohbatbhai Narvatbhai Thakor	Sutaria	Balasinor	8141183343
41	Phulsingh Narwatsingh Thakor	Bhathla	Balasinor	9924494626
42	Harish Chandra Bharat Singh Chauhan	Khandiwav	Balasinor	9726541219

List of Aapda Mitra Volunteers Mahisagar-2018

Sr.No	Aapda Mitra	Village	Taluk	mobile no	Remarks
1	Bharatsinh B Charel	Lunawada	Lunawada	9586419419	
2	Udesinh Vechatsinh Solanki	Balasinor	Balashinor	8734880870]
3	Kantibhai Phulabhai Pagi	Kolwan	Lunawada	7567728756	
4	Maganbhai Sukhabhai Pugi	Undara	awadaLun	8153893824	
5	Abhabhai Jalambhai Pagi	Kolwan	Lunawada	8469222625	
6	Jayantibhai Nanabhai Machhi	Dolatpura	Lunawada	9586069155	
7	Jayantibhai Manabhai Dhamot	Khundhi	Lunawada	9537030181	
8	Anilbhai Keeritbhai Bhoi	Nani Dave na Muvada	Lunawada	9712421632	
9	Ayubbhai Dashwatbhai Malek	Bedhiya	Lunawada	9099625721	
10	Jaidipbhai Fatabhai Bariya	Signalli	Lunavada	9638007473	
11	Kantibhai Dhulabhai Machhi	Nal na Muvada	Lunawada	9979749568	
12	Bashirbhai Hkimbhai Malek	Bedhiya	Lunawada	9725857794	
13	Hasmukhbhai Kanubhai Chauhan	Namnar	Lunawada	9537945431	
14	Jagdishbhai Pujabhai Vankar	Namnar	Lunawada	8469221545	
15	Vikrambhai Raisinghbhai Bariya	Nana Ora	Santrampur	7434969902	
16	Alpeshbhai Pratap Singh Baria	Nana Ora	Santrampur	8758583382	
17	Vikrambhai Jasingbhai Bariya	Vankdi	Santrampur	9913964055	
18	Sumitraben Manjibhai Pargi	Batkwada	Santrampur	9313104188	
19	Arjikaben Motibhai Katara	Ukhreli	Santrampur	9687140497	

20	Manjulaben Maganbhai	Ukhreli	Santrampur	6355681605	
20	Kharadi	UKIITEII	Santrampur	0333081003	
21	v Singh Jawan Singh Madha Solanki	Bhathla	Balashinor	8140818752	
22	Siddharajsingh Kanaksingh Chauhan	Kavadia	Balashinor	9687728466	
23	Manharbhai Mangalbhai Chauhan	Kavadia	Balashinor	8153009273	
24	Himmat Singh Ratan Singh Solanki	Bhathla	Balashinor	8347409556	
25	Rahulbhai Bhawanbhai Solanki	Bhathla	Balashinor	9909670510	
26	Harishchandra Singh Ajit Singh Chauhan	Khadiwav	Balashinor	9909134433	
27	Jawanbhai Jemabhai Talar	Limbola	Virpur	9726527719	
28	Mukeshbhai Pratapbhai Talar	Limbola	Virpur	9726527719	
29	Abhimanyukumar Nagin Singh Thakor	Khata	Virpur	7567395459	
30	Amritaben Ramabhai Thakor	Saradia	Virpur	7576728357	
31	Savitaben Punambhai Solanki	Saradia	Virpur	9712865647	
32	Varshaben Ratansingh Parmar	Jodhpur	Virpur	8469329750	
33	Chuthabhai Chandubhai Machhi	Waghdungari	Kadaana	9624784048	
34	Laxmanbhai R Damor	Amthani	Kadaana	9978573826	
35	Shankarbhai L Waghadiya	Buchawada	Kadaana	9879491667	
36	Champaben V Machhi	Waghdungari	Kadaana	9712875890	
37	Ramilaben Navinbhai .Machhi	horseman	adaanaK	9727603847	
38	Jashodaben Lalabhai Machhi	Waghdungari	Kadaana	9624784048	
39	Jyantibhai G Maliwad	Kaslavati	Khanpur	7434841766	
40	Bhikhabhai Jawanbhai Maliwad	Kaslavati	Khanpur	7067990463	
41	Mukeshbhai Jawanbhai Maliwad	Kaslavati	Khanpur	9737252848	
42	Manhar D Solanki	Limbadia	Khanpur	8469806447	
43	Harish D Solanki	Limbadia	Khanpur	9978177764	
44	Jagdishbhai Jayantibhai Bamania	Bakor	Khanpur	9726259858	

		List of swimmers	5	
Sr.No	Name	Address	Taluka	Contact no
1	Bhoi .Ravikumar A	urSantramp	Santrampur	9714530057
2	Amit R Bhoi	Santrampur	Santrampur	9925255570
3	Narendra J Bhoi	Santrampur	Santrampur	9428030599
4	Bhoi .Krunal S	Santrampur	Santrampur	9879724911
5	Yogesh A Bhoi	Santrampur	Santrampur	9723931823
6	Kishore H Bhoi	Santrampur	antrampurS	9427057228
7	Punam Chand N Bhoi	Santrampur	Santrampur	9427399402
8	Ashok L Bhoi	Santrampur	Santrampur	9909734237
9	Bakulbhai N Bhoi	Santrampur	Santrampur	9427359785
10	Bhoi .Ambabhai M	Santrampur	Santrampur	9427359794
11	Wagdia haiUdabhai Hirab	Wagdia ni Muwadi	Kadaana	9978032797
12	Wagdia Dalabhai Pratapbhai	Wagdia ni Muwadi	Kadaana	7567427874
13	Wagdia Hirabhai Kaalubhai	Wagdia ni Muwadi	Kadaana	8238401391
14	Wagdia Rughabhai Bhalabhai	Wagdia ni Muwadi	Kadaana	9099148196
15	Wagdia aalubhai SomabhaiK	Rathda	Kadaana	9638560333
16	Bhagabhai M Waghadiya	Rathda	Kadaana	9099182526
17	Manibhai N Vaghadiya	Rathda	Kadaana	8980092113
18	Wagdia Kushalbhai Veerabhai	Rathda	Kadaana	9687139753
19	Wagdia Zavrabhai Salubhai	Chandari	aanaKad	9909264067
20	Rupabhai A Pagi	Chandari	Kadaana	9638006257

ANNEXURE -6

List of Charitable Institution of Mahisagar District.

		Contact details of NGOs					
No	Name of the NGO	STD Code	Phono Numbor		Designation		
1	Navjeevan Charitable Trust Balasinor	-	9426033833	Mr.Salim Saikh	President		
2	Ekta Charitable Trust Balasinor		9574751437	Mr Riyaz Saikh	President		
3	Lions Club of Lunawada		9428782588	Mr Sameer Mehta	President		
4	Mahisagar District Lawyers Association	02674	250674	Shri Manoj R Patel	President		
5	Board of Trade Association, Lunawada	02674	250161 9879391251	Mr Rajesh Joshi	Minister		
6	Parameswar Charitable Trust , Lunawada	02674	252478	Ms.Jagrutiben Dave	President		
7	Red Cross Society , Lunawada	-	9427485217	Shri Sanjay Bhai A Shah	Secretary		
8	JCI Club, Lunawada		9898889048	Mr.Hemang Patel	ntPreside		
9	Being Human Group, Lunawada	-	8980515001	Shri Kalpeshbhai Patelia	President		
10	Sarathi Institute , Godhar	02675	239370 9825594570	Nirmal Kumari	President		
11	Jesus Club, Virpur	02690	277511	-	-		
12	Mahila Utkarsh Mandal , Virpur	02690	277540	-	-		
13	Medical Association , Lunawada	02674	250104 250610/		President		
14	Jan Kalyan Charitable Trust		9712996567	Mr Mayank Joshi	President		

ANNEXURE-7

LIST OF EQUIPMENTS POSSESSED BY NDRF

Total Team in Gujarat:15 (Vadodara:12 Teams and Gandhinagar: 03Teams)

SL.	NAME OF EQUIPMENT	QTY Available with unit in Gujarat
NO.		in Gujarat
1	IRB Boats	81
2	FRB Boats	3
3	OBM (25 HP)	85
4	OBM (40 HP)	3
5	Life buoy	980
6	Life Jackets	312
7	Deep Diving Sets	29
8	Fogging Machine	10
9	Hand Pump Complete Set	100
10	Plastic Sheet(Size:50*4mtr)	75
11	CGI tin sheet	1000 Page167
12	Blanket	NIL
13	Life Buoys	1000
14	Synthetic Life Jacket	1700
15	Family Ridge Single Fly Tent	1000
16	Family Ridge Double Fly Tent	100

LIST OF MAJOR EQUIPMENTS FOR DEAL WITH FLOOD

17	Tent Extendable 4M	91
18	Sanjeevani body cover bag child	25
19	Sanjeevani body cover bag infant	25
20	Sanjeevani body cover bag adult	50
21	Synthetic Sleeping Mat	7500
22	Trolly Mounted Generator St (30KVA)	4
23	Dignity kit for women	NIL
24	Dignity kit for Men	NIL
25	Tent Big Size	NIL
26	Water StorageTank (500Ltr)	41

In addition to above euipments, National disaster Respose Reserve Stores are also available in the unit asper followingdetails.

Communication Equipments available with the unit are as follows:

SL. NO.	NAME OF EQUIPMENT	QTY Available with unit in Gujarat
1	VHF Walkie Talkie	15 4
2	VHF Base Station	22
3	HF	22
4	V-Sat(QDA)	6 Page168
5	Sat Phone	4

•

ANNEXURE-8

CONTACT NUMBER

	District Name: Mahi	sagar		STD Code: 02674			
S.No.	Designation	Name	Office	Mobile	Fax		
1	Collector	Ms. Neha Kumari (IAS)	250664	9978405936	250655		
2	SP	Shri. Jaydeepsinh Jadeja	254001	9978405980	250816		
3	D D O	Shri.C.L.Patel	250945	9978406497	250946		
4	Resident Additional Collector	Shri. C.V.Lata	250165	9727763950	250655		
5	Executive Engineer, R & B	Shri. V.P.Khatediya	250486	9925048136	-		
6	DSO	Shri. N B Rathod	252722	7574898793	250655		
7	СДНО	Dr.C.R.Patel	252702	7567895502	-		
8	DEO	Shri N D Muniya	250901	85111 18848	-		
9	DPEO	Ku.Avaniba D Mori	255590	7567804983	253350		
10	General Manager DIC	Shri L S Jajoo	294234	8160811704	242271		
11	Dy. Director Information	Shri Shaileshbhai Baldaniya	254051	9824646132	_		
<u> </u>			<u> </u>	Page169			

12	Disaster Mamlatdar	Shri S.C.Sangada (i/c)	252300	9429292846	-
13	District Project Officer- (GSDMA)	Shri. Jigar Makwana	252301	9898100757	-

LIASION OFFICER DETAILS

Sr.No	Name of Taluka	Name of Liaison Officer	Designation of Liaison Officer	Contact no
1	Lunawada	Shri.A A Patil	SDM Lunawada	7567010750
2	Santrampur	Shri. C V Patel	SDM, Santrampur	7567010791
3	Balasinor	Shri Hiren Chauhan	SDM, Balasinor	7567010709
4	Virpur	Shri N B Rathod	District Suupply Officer Mahisagar	7574898793
5	Khanpur	Mr. JR Patel	District Agricultural Officer , Mahisagar	7226952008
6	Kadana	Ms. Maitriben Leua	Deputy District Development Officer,	7016632592
			Mahisagar	

TALUKA LEVEL OFFICER CONTACT DETAILS

Taluka Name	Designation	Officer Name	Code	(0)	Mobile
	Prant Officer	Mr. A A Patil		252042	7567010750
Lunawada	Mamlatdar	Shri I H Patel	2674	250013	9737911666
	TDO	Ms Nidhiben Patel		250012	9712606069
	Chief Officer	Shri Nareshbhai Muniya		250006	9909973918
	Prant Officer	Mr. A A Patil		252042	7567010750
Khanpur	Mamlatdar	Shri P.H.Patel	2674	286451	9979482072
	TDO	Shri Y R Ada		286596	9081478893
	Prant Officer	Shri C.V.Patel		221026	7567010791
Sontrompur	Mamlatdar	Shri Ishak Pathan	2675	220026	9913439266
Santrampur	TDO	Ms.Jaimini Patel		220133	7575081366
	Chief Officer	Shri Dipsinh Hathila		220055	9724111001
Kadana	Prant Officer	Shri C.V.Patel		221026	7567010791
	Mamlatdar	Shri B P Khant	2675	237701	9428544101
	TDO	Ms.Hetal Katara		237045	7984973602
Balasinor	Prant Officer	Shri Hiren Chauhan		266500	7567010709
	Mamlatdar	Shri R V Vaghela	2690	267200	7016521284
	TDO	Ms Avani Tabiyar		266005	9429063532
	Chief Officer	Shri A K Patel		266188	9328539034

Virpur	Prant Officer	Shri Hiren Chauhan		266500	7567010709
	Mamlatdar	Shri R.M.Patel	2690	277400	9979423496
	TDO	Shri J B Chaudhary		277262	7778984903

STATE EMERGENCY OPERATION CENTER (SEOC) TELEPHONE NUMBER

Sr.No	Designation	Office No	Mobile no	Fax number
1	Commissioner of Relief	23251509	9978405600	2325168
2	Director of Relief. Gandhinagar	23251611	9978406087	2325168
3	Deputy Collector, Relief	23256335	9978405741	23251568
4	Mamlatdarshri Disaster	23251907	9978405744	23251912
5	Mamlatdarshree, Disaster	23251907	9978405745	23251912
6	State Emergency Operation Centre, (SEOC	23251900		23251912
	Gandhinagar)	23251902		23251916
		23251907		

DAM SITE CONTROL ROOM NUMBER

Sr.No	Name of Dam	Contact no
1	Kadana Dam , Flood Control No- Divda Colony , Kadana	02675-237627
		8238096913
2	Panam Dam	02672-242648
3	Bhadar Dam	9727285024

TALUKA FLOOD CONTROL ROOM NUMBER

Sr.No	Name of Taluka	Telephone Number
1	Lunawada	02674-250013
2	Khanpur	02674-286451
3	Kadana	02675-237701
4	Santrampur	02675-220026
5	Balasinor	02690-267200
6	Virpur	02690-277402

DISTRICT Fire Brigade Numbers:

Sr.No	Name of Taluka/	Office No	Mobile no
	Name of Fire Officer		
1	Mr. Jaymal Parmar	02675-250006	8980249665
	Mr. Parth Patel		9712717854
	Lunawada/Khanpur		
2	Mr. R Kazi	02675-220055	9428367890
	Santrampur/Kadana		
3	Mr. Pawan Kumar Patel	02690-266188	9879021695 /
	Ranjit Singh Solanki		9712839474
	Balasinor/Virpur		

Nearest Fire Station :-

Sr.No	Name of Fire Station	Contact no
1	Godhra	02672-240043
2	Modasa	02772-246209
3	Dahod	02673-245333

Department of Education, Mahisagar :

Sr.No	Officer's Name	Designation	Office No	Mobile no
1	Shri.N D Muniya	District Education Officer	02674-250901	8511118848
2	Dr. Avniba Mori	District Primary Education Officer	02674-25 5590	7557804983
3	Mr. J A Pandor	Deputy District Primary Education Officer		9978913580
4	Mr. BL Maliwad	Taluka Primary Education Officer , Lunawada		9687249152
5	Mr. A K Pargi	Taluka Primary Education Officer, Santrampur		9427656722
6	Mr. M H Patel	Taluka Primary Education Officer,Kadana (i/c)		9427489095
7	Mr. J. A. Pandor	Taluka Primary Education Officer , Balasinor		9978913580
8	Mr. A V Parmar	Taluka Primary Education Officer , Khanpur(i/c)		9978368511
9	Shri.V B Patel	Taluka Primary Education Officer,Virpur(i/c)		9574394805
10	Shri M. J. Prajapati	Deputy Chitnish		9427595940
11	Mr.N.R.Patel	Sr. Clerk		9714379460

Veterinary Officer and Livestock Inspector working under Mahisagar Animal Husbandry Branch

Sr. No	Officer / Name of the Employee	Designation	Present Post	Name of Taluka	Mo. No
1	Dr. MG Chavda	Deputy Director of Animal Husbandry	Animal Husbandry H District Mahisa		02674-250144 9924439069
		- Internet in a sound of y			9924439009
			V. H. Lunawada	Lunawada	
			V.H Senadariyana Gorada (i/c)	Lunawada	
2	Dr.H.N.Joshi	Veterinary Officer	V.H Vardhari (i/c)	Lunawada	9712435056
			V.H Kothamba (i/c)	Lunawada	
			V.H Chavdibai's Muwada (i/c)	Lunawada	
			V.H. Vadagam	Khanpur	
3	Dr.R.A Surani	Veterinary Officer	V.H Bakor (I/C)	Khanpur	7359930857
			V.H.Pandarwada(I/C)	Khanpur	
			V.H.Santrampur (I/C)	Santrampur	
4	Dr. S.S Devada	Veterinary Officer	V.H. Kalibel(I/C)	Santrampur	9712638225
			V.H. Batakwada (I/C)	Santrampur	

Page175

			V.H Nani Kharsoli	Kadana	
			V.H.Nani Rath (I/C)	Kadana	
			V.H Munpur (I/C)	Kadana	
			V.H. Malvan (I/C)	Kadana	
			V.H Virpur	Virpur	
			V.H. Debhari (I/C)	Virpur	
5	Dr.K.J.Chauhan	Veterinary Officer	V.H Balasinor (I/C)	Balasinor	9016176200
			V.H. Janod (I/C)	Balasinor	

Sr.No	Officer / Name of the Employee	Designation	Place of duty of present appointee	Name of Taluka	Mo. No
1	Dr. H.N. Joshi	Veterinary Officer	V.H.Lunawada	Lunawada	9712435056
2	Dr. H.N. Joshi	Veterinary Officer	V.H.S.Gorada (i/c)	Lunawada	9712435056
3	Dr. H.N. Joshi	Veterinary Officer	V.H. Vardhari (i/c)	Lunawada	9712435056
4	Dr. H.N. Joshi	Veterinary Officer	V.H.Kothamba (i/c)	Lunawada	9712435056
5	Dr. H.N. Joshi	Veterinary Officer	V.H Chavdibaina Muwada (i/c)	Lunawada	9712435056

Page176

6	Mr H.B. Patel	Veterinary Inspector	V.H Panch Mahudiya	Lunawada	9427371622
8	Mr H.B. Patel	Veterinary Inspector	V.H Dhamod (i/c)	Lunawada	8141177159
9	Mr MB Thakor	Veterinary Inspector	V H Undara (i/c)	Lunawada	8141177159
10	Mr. Satish B Khant	Veterinary Inspector	A.B.C. Malekpur (i/c)	Lunawada	9099645593
11	Mr.Rushubh Chaudhari	Veterinary Inspector	A.B.C. Kharol (I/c) charge)	Lunawada	9825774143
12	Dr. R.A.Surani	Veterinary Officer	V.H.Vadagam	Khanpur	7359930857
13	Dr. RA Surani	Veterinary Officer	V.H.Bakor (i/c)	Khanpur	7359930857
14	Dr. RA Surani	Veterinary Officer	V.H.Pandarwada(i/c)	Khanpur	7359930857
15	Shri B.T Rathore	Veterinary Inspector	P.A.H.C Khanpur	Khanpur	9925981734
16	Dr. S.S Devada	Veterinary Officer	V H Santrampur (i/c)	Santrampur	9712638225
17	Dr. S.S Devada	Veterinary Officer	V.H.Kalibel (i/c)	Santrampur	9712638225
18	Dr. S.S Devada	Veterinary Officer	V.H Batakwara (i/c)	Santrampur	9712638225
19	Shri S. S. Wadera	Veterinary Inspector	P.A.H.C. Moti Bhugedi	Santrampur	9427399043
20	Shri J S Maliwad	Veterinary Inspector	P.A.H.C. Gothib (i/c)	Santrampur	9510648458
21	Shri S. S. Wadera	Veterinary Inspector	P.A.H.C. Babarol (i/c)	Santrampur	9427399043

22	Shri S. S. Wadera	Veterinary Officer	P.A.H.C. Ukhreli (i/c)	Santrampur	9427399043
23	Shri S. S. Wadera	Veterinary Officer	P.A.H.C. Khedapa (i/c)	Santrampur	9427399043
24	Shri Bhargav Patel	Veterinary Inspector	P.A.H.C. Nani Sarsan (i/c)	Santrampur	8141353949
25	Mr V M Patel	Veterinary Inspector	Sub V H Rafai (i/c)	Santrampur	9016312742
26	Dr. S.S Devada	Veterinary Officer	V.H. Nani Kharsoli	Kadana	9712638225
27	Dr. S.S Devada	Veterinary Officer	V.H Nani Rath(i/c)	Kadana	9712638225
28	Dr. S.S Devada	Veterinary Officer	V.H Munpur (i/c)	Kadana	9712638225
29	Dr. SS Devada	Veterinary Officer	V.H Malvan (in charge)	Kadana	9712638225
30	Mr. A.L. Khant	Veterinary Inspector	P.A.H.C Kajadi	Kadana	9687893095
31	Mr. Mahipal Damor	Veterinary Inspector	P.A.H.C Ditwas (in charge)	Kadana	8469317255
32	Mr. A.L. Khant	Veterinary Inspector	P.A.H.C Saraswa (i/c)	Kadana	9687893095
33	Dr. K.J Chauhan	Veterinary Officer	V.H Virpur	Virpur	9016176200
34	Dr. K.J Chauhan	Veterinary Officer	V.H Debhari (i/c)	Virpur	9016176200
35	Mr D.M. Patel	Veterinary Inspector	P.A.H.C. Koydam	Virpur	9825446190
36	Dr. KJ Chauhan	Veterinary Officer	V.H Balasinor (in charge)	Balasinor	9016176200

37	Dr. KJ Chauhan	Veterinary Officer	V.H Janod (in charge)	Balasinor	9016176200
38	Shri K. D. Patel	Veterinary Inspector	P.A.H.C. Dev	Balasinor	9825774143
39	Shri A.A. Sheikh	Veterinary Inspector	P.A.H.C Parbia	Balasinor	9427387975
40	Shri G. S Sheikh	Veterinary Inspector	A.B.C Vadadala	Balasinor	9427389141

HEALTH DEPARTMENT:

District Level Health Officer

Sr.No	Name of Officer	Designation	Mobile No
1	2	3	4
1	Mr. C.L.Patel (IAS)	DDO	9978406497
2	Dr. C. R. Patel	СDНО	7567895502
3	Dr. C.R. Pateliya	ADHO	9427935850
4	Dr. Kamlesh K. Parmar	RCHO	9428024254
5	Dr. Narendra S. Gosai	DSO/EMO	9925785955
6	Dr. B. R. Panchal	DQAMO	9727234908
7	Dr. Ravi Seth	DLO	9714879040
8	Dr. Dharmendra D. Chauhan	DTO	9825844300
9	Dr. Alpesh Chaudhari	DMO/VBO	9726545005
10	Mr.Rakeshkumar B. Bamniya	DSBCC	9824269889
11	Mr. Janak N. Patel	DPC	7567895116
12	Dr. Hanif U. Shaikh	EPIDEMIOELOGIST	8140716698
13	Mr.Manish Parmar	DFO	7567893302
14	Mr. Said S. Shekh	DATA MANAGER Page179	9925255729

ſ	15	Mrs. Rinki P. Desai	DPA(IDSP)	9725752066
	16	Mr. Pankajbhai K. Shah (I/C)	DSI	7567893278

GENERAL HOSPITAL

SN	CDII	Name of Superintendent	Designation		no.	
SIN	SDH		Designation	STD Code	Number	Mobile No
1	2	3	4	6	7	8
2	Cottage Hospital	Dr.Bhamini Pandit	СДМО	02674	250008	7984856329
3	State Hosp. Santrampur	Dr. Madhulika Mukhargi	SDH-Supt	02675	220046	7567867196

TALUKA HEALTH OFFICER CONTACT LIST

SN	Taluka	Name of Officer	Desi.	Phone no. (Landline)		Mobile No
				STD code	Number	
1	2	3	4	6	7	8
1	Lunawada	Dr. Sumitraben J. Panchal	ТНО	02674	250428	7567893532
2	Kadana	Dr. Subhashchandra C. Dhaka	ТНО	02675	236885	7567893634
3	Santrampur	Dr. Vijay Damor	ТНО	02675	221852	7567893419
4	Khanpur	Dr. Alpesh Chudhary (I/C)	ТНО	02675	236885	7567863369
5	Balasinor	Dr. Dipak Vataliya	ТНО	02690	268151	7567863366
6	Virpur	Dr. Babubhai J. Malivad	ТНО	02690	268151	7567863369

CHC MEDICAL OFFICER LIST

SN	Taluka	СНС	Name MO	Mobile No
1	Balasinor	Balasinor (Supt.)	Dr Dharmendr.K.Gohil	9099064127
2	Balasinor	Balasinor	Dr.Jyoti Amin	9099064152
3	Balasinor	Balasinor	Dr.Kiran Parmar Page180	9099064242

	11			
4	Balasinor	Balasinor	DR. Tarun Damor	9081753235
5	Balasinor	Balasinor	Dr.Ka Patel Sagar Nileshbhai	9726730487
6	Kadana	Ditvas (Supt.)	Dr.S.C.Dhaka (I/C)	8980514254
7	Kadana	Ditvas	Dr.Vaidehiben Bhatt	9173517897
8	Kadana	Kadana (Supt.)	Dr.S.C.Dhaka (I/C)	8980514254
9	Kadana	Kadana	Dr.Apekshaben Taral	7573089791
10	Kadana	Kadana	Dr. N.R.Kharadi	9408764445
11	Khanpur	Bakor (Supt.)	Dr.B.J.Malivad (I/C)	7567863369
12	Khanpur	Bakor	Dr N.S.Pargi	7567867199
13	Lunavada	Viraniya (Supt.)	Dr.Sumitraben Panchal (I/C)	6359973743
14	Lunavada	Viraniya	Dr Nirali M Bariya	9428240881
15	Lunavada	Viraniya	Dr.Hinaben Katara	8849325139
16	Lunavada	Kothamba	Dr Kinjal Vyash (I/C)	9033515389
17	Lunavada	Kothamba	Dr. Aishwarya S. Bulsara	9924599157
18	Lunavada	Kothamba	DR. Vidhi S. Patel	7575065871
19	Lunavada	Kothamba	Dr. Banshilal R. Manat	9727316981
20	Santrampur	Chutha na Muvada (Supt.)	Dr.Maulik Mahera (I/C)	9725730183
21	Santrampur	Chutha na Muvada	Dr.Bhavesh Bhuriya	8469720113
22	Santrampur	Chutha na Muvada	Dr.B.R.Panchal	9727234908
23	Santrampur	Chutha na Muvada	Dr.Avi V.Patel	9913401316
24	Santrampur	Gothib (Supt.)	Dr.J.K.Patel (I/C)	9426555153
25	Santrampur	Gothib	Dr Amisha Chandna	7984820677
26	Virpur	Virpur (Supt.)	Dr.Sandip Saxena (I/C)	7621057077
27	Virpur	Virpur	Dr Khushbu J Bamaniya	7600385083

RAPID RESPONSE TEAM

CATEGORY	NAME	CONTACT NO.	OFFICE ADDRESS	RESIDENTIAL ADDRESS
District Nodal officer, Epidemic Medical Officer	Dr. Narendra S. Gosai	7573006974, 9925755955	C-206, Epidemic Branch, District Panchayat Mahisagar	28,Lax Amrut Society,Charel Road,Lunawada, Mahisagar
District Malaria Officer (NVBDCP)	Dr. Alpesh Chaudhari	9726545005	C-205, Malariya Branch,District Panchayat Mahisagar	At. Mota Vadala, Ta. Lunawada, Dist. Mahisagar
Physician (Private)	Dr. Jigar J. Patel	9726689988	J. J. Hospital, Godhra Lunawada Road, Lunawada	Opp.BSNL Offfice,Behind Maruti Nagar, Vardhari Road, Lunawada, Mahisagar
Pediatrician	Dr. Shailesh Panchal	9998968730	DH Hospital, Lunawada.	21,Vaibhav Ngar,Opp.Police LineDholi Road,Bh.BSNL Exchnage,Lunawada
Assistant Professor GCS Medical college Ahmedabad	Dr. Rujul Shukla	8200604967	Dept of Community Medicine, GCS Medical college Ahmedabad.	Dept of Community Medicine, GCS Medical college Ahmedabad.
Epidemiologist	Dr. Hanif Shaikh	8140716698, 6359973668	C-206, Epidemic Barnch,District Panchayat Mahisagar	A-7, Nialm Society, Rajput Road,Balasinor Mahisagar
Medical Officer (Ayush)	Dr. Kalpesh Suthar	7567894582	Primary Health Center Madhvas, Lunawada	Karmyog Appartment,Dungra bhint, Lunawada, Mahisagar
Microbiologist(Pathologist)	Dr. Shivani Sonara	9265611899	DH Lunawada, Lunawada.	District Hospital Lunawada, Godhara Road, Lunawada
Deputy Director of Animal Husbandry	Dr. Mukesh Chavada	9924439069	C-11,Ground Floor, District Panchayat, Lunawada, Mahisagar	House No -9, Jalaram Society, Lunawada

Transport Facility (Vehical No. GJ18 GB-1368)	Shree Jaydevsinh B. Thakor	7203818585	District Health Panchayat Mahisagar	Chauhan Na Muvada,Lunawada, Mahisagar
Food & Drug	Shree Bankim Chaudhary	9825363735	3 rd Floor,Jilla Seva Sadan Compound, Godhra	House No.203,3 rd Floor, Geeta Amrut avenue, Bamroli Road, Godhra, Panchmahal

TALUKA RAPID RESPONSE TEAM

Sr. No	Taluka Name	Member of Team	Designation	Mobile No	Vehicle No	
		Dr. Aryan Patel	MO – Othvad	7567893360		
		Mr vipulbhai rabari	LT - Othwad	9714532081		
1	Balasinor Team-1	Mr.Abhishekbhai Goswami	Pharmacist – Janod	6353747840	GJ35T2714	
	I cam-1	Mr.Dineshbhai V. Chauhan	MPHW - Dev	9726794787		
		Mr.Dashrathbhai Mahera	Dirver - Rbsk Team-128	6352497828		
		Dr.Hirenkumar Gendalbhai Damor	MO -Munpur	9574368552		
		Mrs. Nilanginiben Chudhary	LT -Munpur	7874289625		
2	Kadana- Team-2	Mr.Mananbhai Upadhyay	Pharmacist - Ditvas	9428769509	GJ17G6511 - (GOVT)	
	1 Cam-2	Mr.Mahendra R. Puwar	MPHW – Kadana1	9913684369	(0011)	
		Mr.JashwantbhaiDamor	Driver - Amthani	9712803646		
		Dr.Dipak Patel	MO - Vadagam	9428132265		
		Mr. Kuldeep M. Patel	LT - Pandarwada	9825378694		
3	Khanpur -	Mr.Akshay H. Buch	Pharmacist -Vadagam	9875147649	GJ09JU2662	
5	Team-3	Mr.Bharat P.Rana	MPHW - Limbadiya	9099596609	GJ0)J02002	
		Mr.Sureshbhai Bhagwanbhai Nut	Driver - Vadagam Rbsk Team	9327610983		
		Dr.Hardik R. Pranami	MO- Viraniya	7069375627		
		Mrs. Anjuben D. Sangada	LT- Madhwash	9408121168		
4	Lunawada - Team-4	Mr.Ankurbhai Kapadiya	Pharmacist - Viraniya	9033293679	GJ17G6506 - (GOVT)	
	I Cam-7	Mr.Bipnbhai S. Patel	MPHW - Madhwash	7435041071	(0011)	
		Mr.Narendra Suthar	Driver - Vardhari	9909116339		
			Page1	83		

		Dr. Nikunj Damor	MO - ukhreli	7016152500	
		Mr. Khilabhai Kanubhai Gavit	LT – Khedapa	9081597795	
5	Santrampur - Team-5	Mr.Virendrabhai Gemabhai Gavit	Pharmacist - Doli	9558629686	GJ17G5174 - (GOVT)
		Mr.Gopalbhai M. Damor	MPHW - Vankadi	9879591433	
		Mr.Bharatbhai Kalal	Driver - Chuthana Muvada	9726728433	
		Dr. Dharmendrasinh Vakhatsinh Thakor	MO – Salaiya	7567863373	
	Virpur	Mrs. Jixaben Patel	LT – Saliya	9723235990	
6	Team- 6	Mr.Hetalben Vankar	Pharmacist - Bar	9664706564	GJ35T1550
		Mr.Ramchnadra M. Patel	MPHW -Koydam	7435041014	
		Mr.Vijaybhai Parmar	Driver - Rbsk Team 131	9537355705	

PHC MEDICAL OFFICER TELEPHONE NUMBER

SN	Taluka	PHC Name	Medical Officer Name	MBBS/ AYUSH	Mobile No
1	Balasinor	Gunthli	Dr.Jeel Hemangbhai Patel	MBBS	8735969619
2	Balasinor	Janod	Dr.Nisargkumar Rushikeshbhai Patel	MBBS	9737892001
3	Balasinor	Othvad	Dr.Aryan Prakashbhai Patel	MBBS	9714339682
4	Balasinor	Pandva	Dr.Vaibhavi Durlabhjibhai Makwana	MBBS	8155007030
5	Kadana	Amthani	Dr.Sarswati Chetanbhai Pranami	MBBS	7778840955
6	Kadana	Malvan	Dr Nilaykumar Rameshchandra Kasbati	MBBS	7434097189
7	Kadana	Malvan	Dr. Alpesh S. Chaudhari	MBBS	7567894022
8	Kadana	Munpur	Dr.Sanjaykumar Navinchandra Patel	MBBS	9512007745
9	Kadana	Munpur	Dr.Hirenkumar Gendalbhai Damor	MBBS	9574368552

10	Kadana	Sanghri	Dr.Krunalgiri Narangiri Gosai	MBBS	6354731204
11	Kadana	Sanghri	Dr.Maitriben Kalpeshkumar Patel	MBBS	9624174280
12	Kadana	Sarsava (North)	Dr.Kamleshbhai Shivabhai Pagi	MBBS	9574787376
13	Khanpur	Mota Khanpur	Dr.Vaishaliben Rameshchandra Malivad	MBBS	7874402762
14	Lunawada	Hathivan	Dr.Chiragkumar Hasmukhbhai Chauhan	MBBS	7433030724
15	Lunawada	Kharol	Dr.Nehaben Chhaganbhai Gelat	MBBS	7817902787
16	Lunawada	Madhvas	Dr.Rohan Bachubhai Fanat	MBBS	8200190684
17	Lunawada	Undra	Dr.Krupalkumar Dineshbhai Patel	MBBS	8401538383
18	Lunawada	Vardhari	Dr.Dhruv Atulkumar Patel	MBBS	9512926858
19	Lunawada	Viraniya	Dr. Hardikkumar R.Pranami	MBBS	7069375627
20	Santrampur	Batakwada	Dr.Niruben S.Pargi	MBBS	7567893409
21	Santrampur	Batakwada	Dr.Chiragkumar Kiritbhai Damor	MBBS	9998710191
22	Santrampur	Chitva	Dr. Harshitkumar Ramanbhai Chandana	MBBS	9558307437
23	Santrampur	Chitva	Dr.Niyati Paragbhai Pranami	MBBS	8469586507
24	Santrampur	Chunthana Muvada	Dr.Maulikkumar Dilipkumar Patel	MBBS	8238027140
25	Santrampur	Chunthana Muvada	Dr.Swapnilkumar Rajubhai Patel	MBBS	9723085038
26	Santrampur	Doli	Dr.Vishalkumar Dineshbhai Prajapati	MBBS	9824348354
27	Santrampur	Gadiya	Dr.Jayeshkumar Narsinhbhai Sangada	MBBS	8160804748
28	Santrampur	Khedapa	Dr.Parth S.Patel	MBBS	9773092969
29	Santrampur	Rambhem na Muvada	Dr.Sejalkumari Anilkumar Patel	MBBS	8849660605
30	Santrampur	Sarsan	Dr.Hemaben Bhurabhai Kharadi	MBBS	7041999828

31	Santrampur	Sarsan	Dr.Aakash Manubhai Pagi	MBBS	9408050288
32	Santrampur	Ukhreli	Dr.Nikunjkumar Somabhai Damor	MBBS	7016152500
33	Santrampur	Ukhreli	Dr.Komalben Ranchhodbhai Damor	MBBS	9898814445
34	Santrampur	Umber	Dr.Dipak Dudabhai Darji	MBBS	9099858813
35	Santrampur	Vankdi	Dr.Anandkumar Bharatkumar Sardava	MBBS	8511554123
36	Virpur	Bar	Dr.B.L.Sangada	MBBS	8469168078
37	Virpur	Debhari	Dr J B Bhagora	MBBS	9825464039
38	Balasinor	Gunthli	Dr Anantkumar Champaklal Shah	Ayush	7567863364
39	Balasinor	Janod	Dr.Devendra B. Shah	Ayush	7567863367
40	Balasinor	Othvad	Dr.Dhvaniben Nareshbhai Shah	Ayush	7567863361
41	Balasinor	Pandva	Dr.Shekh Nilofarbanu Rafikbhai	Ayush	7046001724
42	Kadana	Amthani	Dr. Rashmika Somabhai Patel	Ayush	7567893636
43	Khanpur	Mota Khanpur	Dr.Jyoti Patel	Ayush	9925969575
44	Khanpur	Pandarwada	Dr.akanxaben mukeshbhai Chavda	Ayush	9428256979
45	Khanpur	Vadagam	Dr. Dipakkumar Virabhai Patel	Ayush	9512007957
46	Kadana	Malvan	Dr Moxika M Shah	Ayush	9979068303
47	Lunawada	Sanghari	Dr.Kalpesh M Suthar	Ayush	7567894582
48	Lunawada	Malekpur	Dr. Vijay Gadhvi	Ayush	8347451050
49	Lunawada	Vardhari	Dr Rekhaben M Goswami	Ayush	6357074661
50	Lunawada	Viraniya	Dr Mayaben Asokbhai Makwana	Ayush	9898507357
51	Lunawada	Undra	Dr.Patel Apexaben Maheshkumar	Ayush	9265337876

52	Santrampur	Chunthana Muvada	Dr.Shaikh Shenaz Nisar	Ayush	9173849100
53	Santrampur	Sarsan	Dr.Shileeben S.Patel	Ayush	7567403443
54	Virpur	Bar	Dr Mehulabhai Shantilal Pateliya	Ayush	7567863370
55	Virpur	Debhari	Dr Hetalben Ramanbhai Solanki	Ayush	9512007629
56	Virpur	Salaiya	Dr. Dharmendrasinh Vakhatsinh Thakor	Ayush	7567863373

PRIVATE SPECIALIST DOCTOR LIST OF MAHISAGAR

S/N	Hospital	Taluka	SPECIALIZATION	Mobile No
1	Shah Orthopaedic Hospital	Lunawada	Orthopaedic	9825437798
2	Shanjivni Hospital	Lunawada	Gynaecologist	9426023456
3	Bhagat Hospital	Lunawada	Gynaecologist	9825031904
4	Navjivan Hospital	Lunawada	Gynaecologist	9824392496
5	Haley Maternity And Nursing Home	Lunawada	Gynaecologist	9426511156
6	Jeevandeep Hospital	Lunawada	Gynaecologist	9427398681
7	Aarohi Maternity Hospital	Lunawada	Gynaecologist	9909913833
8	Krishana Surgical Hospital	Lunawada	Surgeon	9426023455
9	Shuvidha Hospital	Lunawada	Gynaecologist	2674250603
10	Sainath Hospital	Lunawada	Gynaecologist	9979108989
11	Jalaram Hospital	Lunawada	Gynaecologist	2674255755
12	Subbheccha Hospital	Lunawada	Gynaecologist	9978918409
13	Vinayak Orthopedic Hospital	Lunawada	Orthopaedic	9099030980
14	Mamata Hospital	Lunawada	Gynaecologist	9426540479

15	Drashti Netralay	Lunawada	Ophthalmologist	7698615980
16	Lilawati Hospital	Lunawada	Physician	9979210098
17	Jay Surgical	Lunawada	Surgeon	9909285100
18	Pooja Hospital	Lunawada	Gynaecologist	2674250104
19	Sraddha Hospital	Lunawada	Physician And Cardiac	9426549558
20	Shifa hospital	Lunawada	Surgeon	2674250478
21	Ayush Children	Lunawada	Paediatrics	2674251730
22	Chirayu Children	Lunawada	Paediatrics	6352449378
23	J. K. Hospital	Lunawada	Physician	9601111312
24	Bhakti Hospital	Lunawada	Physician	9879518324
25	J. J. Hospital Lunawada	Lunawada	Physician	9726689928
26	Surekha ba hospital	Santrampurr	Gynaecologist	7096853270
27	Shraddha Maternity & Nursing Hospital	Santrampurr	Gynaecologist	9879724323
28	Meera Hospital	Santrampurr	Gynaecologist	9825660640
29	Sukulanandi Hospital	Santrampurr	Physician	9409170936
30	Riddhi Siddhi Hospital	Santrampurr	Physician	9428446479
31	Parasmani Hospital	Santrampurr	Physician	8141571515
32	Dr Modi Hospital	Santrampurr	Orthopaedic	9428367300
33	Sarvoday Hospital	Balasinor	Gynaecologist	9925106118
34	K.M.G And KSP Hospital	Balasinor	Multi Specialist	9375850339
35	Sagar Hospital	Balasinor	Surgeon	9879793088
36	Mina Hospital	Balasinor	Gynaecologist	9427853766

[37	Shilpi Hospital	Balasinor	Gynaecologist	9979230323
Ī	38	Gujarat Hospital	Balasinor	Orthopaedic	9825978477

BLOOD DONOR LIST

Sr No	Donor Name	Mobile	Age	M/F	Blood Group
1	BHAVESHBHAI D PATEL	8141175111	42	М	O Positive
2	HETALBEN HEMANTKUMAR PATEL	9409250025	53	F	B Positive
3	RAKESH P BAROT	9909034999	50	М	AB Positive
4	AMITBHAI P VARIYA	9426262066	44	М	A Positive
5	MANISHKUMAR H TRIVEDI	9722402305	51	М	B Positive
6	LILABEN D CHAUHAN	9558820916	35	F	A Positive
7	ASHWINKUMAR J PANDYA	9428448959	48	М	A Positive
8	MANOJBHAI R PATEL	9426405899	58	М	O Positive
9	JAYABEN G PANDYA	9725619384	56	F	A Positive
10	DINESHBHAI M RATHOD	9687922971	41	М	B Positive
11	PARULBEN A PARMAR	9725061481	36	F	O Positive
12	RAVIRAJSINH H SISODIYA	7567727386	25	М	O Positive
13	ARVINDKUMAR M KAKA	9909214746	58	М	O Positive
14	PUSHPATSING S CHAUHAN	9638820149	33	F	B Positive
15	NILESH GUMANSINH RAUJI	7990189348	47	М	O Negative
16	RAKESHBHAI M CHAUHAN	7600141412	43	М	O Positive
17	JIGNESHKUMAR P BAMANIYA	8980478533	31	М	B Positive
18	MUKESHKUMAR P PARMAR	9722422305	54	М	B Positive
19	TEJAS C SONI	9426063985	54	М	A Positive
20	KETAN K PATEL	9723922590	33	М	O Positive

21	DHARMISTHA P PARMAR	9687402006	33	М	A Negative
22	RAHULKUMAR N MARWADI	7624045463	30	М	B Positive
23	MAHENDRABHAI NANDUTRASINH CHAUHAN	7575819614	26	М	AB Positive
24	PRITESHBHAI PARVATBHAI KALASVA	9106832534	26	М	O Positive
25	SANJAYKUMAR RUPABHAI DAMOR	8980563058	30	M	B Positive
26	NIRAJKUMAR B PANDYA	9870083021	33	М	A Negative
27	MANILAL GANPATBHAI PAGI	7359606163	40	М	B Positive
28	DHARMENDRASINH S TAVIYAD	9664626413	31	M	B Positive
29	SACHINKUMAR DAHYABHAI JOSHI	9924888003	34	М	A Negative
30	ANKITKUMAR JAYANTILAL PUVAR	9825711896	41	Μ	O Positive
31	BHAVINKUMAR C PATEL	9712114379	30	M	AB Positive
32	SHAILESH BHARATBHAI THAKOR	9824370207	35	Μ	O Positive
33	SHITALBEN C PARIKH	9426765400	43	F	AB Positive
34	PRAKASHKUMAR MANUBHAI MAKWANA	8469681304	36	М	B Positive
			24	M	O Positive
35	CHETANKUMAR M PRAJAPATI	9726937108			
36	VIJAYBHAI L PARMAR	9624307173	24	M	B Positive
37	VIPULKUMAR BABUBHAI RANA	8490818474	26	M	O Positive
38	LAXMANBHAI RANCHODBHAI RATHOD	9687569503	33	М	B Positive
39	KIRTIPALSINH INDRASINH RANA	8849581177	25	М	O Positive
40	NARESHKUMAR A TAVIYAD	8141578006	35	М	A Positive
41	YASHKUMAR R DABGAR	7016973299	27	М	B Positive
42	VINODBHAI C DAMOR	9099706575	27	M	B Positive
43	SHAILESHKUMAR P RAJAT	7435092046	38	M	B Positive
44	MAHESHBHAI SOMABHAI KHANT	7069657852	25	M	A Positive
		a J	Page1	90	<u> </u>

TAPBHAI JETHABHAI PARMAR ARKUMAR MAHESHBHAI RANA ALESHBHAI PUJABHAI VANKAR MUKHBHAI HIRABHAI BARIYA DHDHRAJ KUMAR D KHANT AYKUMAR BABUBHAI DAMOR ALESHBHAI P MAKWANA TKUMAR D KATARIYA AVESHKUMAR RAMABHAI ZALA ESHKUMAR H RATHOD	9727488113 9924727390 7202932646 8141966053 7874432179 8758053270 8141629860 9824936304 9737220409 7096412633	31 30 36 34 32 33 39 36 26 32	M M M M M M M M M M	O PositiveAB PositiveO PositiveB PositiveB PositiveB PositiveO PositiveO Positive
ALESHBHAI PUJABHAI VANKAR MUKHBHAI HIRABHAI BARIYA DHDHRAJ KUMAR D KHANT AYKUMAR BABUBHAI DAMOR ALESHBHAI P MAKWANA TKUMAR D KATARIYA AVESHKUMAR RAMABHAI ZALA ESHKUMAR H RATHOD	7202932646 8141966053 7874432179 8758053270 8141629860 9824936304 9737220409 7096412633	36 34 32 33 39 36 26	M M M M M M M	O Positive B Positive B Positive B Positive A Positive O Positive
MUKHBHAI HIRABHAI BARIYA DHDHRAJ KUMAR D KHANT AYKUMAR BABUBHAI DAMOR ALESHBHAI P MAKWANA TKUMAR D KATARIYA AVESHKUMAR RAMABHAI ZALA ESHKUMAR H RATHOD	8141966053 7874432179 8758053270 8141629860 9824936304 9737220409 7096412633	34 32 33 39 36 26	M M M M M	B Positive B Positive B Positive A Positive O Positive
DHDHRAJ KUMAR D KHANT AYKUMAR BABUBHAI DAMOR ALESHBHAI P MAKWANA TKUMAR D KATARIYA VESHKUMAR RAMABHAI ZALA ESHKUMAR H RATHOD	7874432179 8758053270 8141629860 9824936304 9737220409 7096412633	32 33 39 36 26	M M M M	B Positive B Positive A Positive O Positive
AYKUMAR BABUBHAI DAMOR ALESHBHAI P MAKWANA TKUMAR D KATARIYA VESHKUMAR RAMABHAI ZALA ESHKUMAR H RATHOD	8758053270 8141629860 9824936304 9737220409 7096412633	33 39 36 26	M M M	B Positive A Positive O Positive
ILESHBHAI P MAKWANA TKUMAR D KATARIYA VESHKUMAR RAMABHAI ZALA ESHKUMAR H RATHOD	8141629860 9824936304 9737220409 7096412633	39 36 26	M M	A Positive O Positive
TKUMAR D KATARIYA VESHKUMAR RAMABHAI ZALA ESHKUMAR H RATHOD	9824936304 9737220409 7096412633	36 26	M	O Positive
VESHKUMAR RAMABHAI ZALA ESHKUMAR H RATHOD	9737220409 7096412633	26		
ESHKUMAR H RATHOD	7096412633		M	
		32		O Positive
PENDRASINH R CHAUHAN		52	М	B Positive
	9712729801	33	Μ	B Positive
KESHSINH P GARASIYA	8160322605	26	М	B Positive
NHARBHAI S CHAUHAN	9909834129	41	Μ	O Positive
IENDRAKUMAR RAMESHBHAI				
UHAN	7069937346	28	Μ	O Positive
IN BHOI	9574305815	20	М	A Positive
UBHAI SOMABHAI CHAUHAN	9265598302	36	М	A Positive
ARKUMAR J TRIVEDI	9904743999	32	М	O Positive
VATBHAI C PARMAR	8758139311	35	М	A Positive
OKBHAI KALABHAI CHAUHAN	9714550614	48	М	A Positive
RISBHAI RATILAL MAKWANA	7600713749	54	М	AB Positive
UBHAI PUNABHAI CHAUHAN	8155848712	53	М	B Positive
ABHAI REVABHAI ROHIT	8141143369	27	М	O Positive
VINSINH TAKHATSINH SOLANKI	9909206108	57	М	A Positive
DISHBHAI SOMABHAI MALIWAD	7984396499	43	M	O Positive
	708/306/00	43	M	A Positive
	UHAN N BHOI JBHAI SOMABHAI CHAUHAN RKUMAR J TRIVEDI VATBHAI C PARMAR OKBHAI C PARMAR OKBHAI KALABHAI CHAUHAN ISBHAI RATILAL MAKWANA UBHAI PUNABHAI CHAUHAN ABHAI REVABHAI CHAUHAN ABHAI REVABHAI ROHIT VINSINH TAKHATSINH SOLANKI DISHBHAI SOMABHAI MALIWAD	UHAN7069937346N BHOI9574305815JBHAI SOMABHAI CHAUHAN9265598302RKUMAR J TRIVEDI9904743999VATBHAI C PARMAR8758139311OKBHAI KALABHAI CHAUHAN9714550614ISBHAI RATILAL MAKWANA7600713749UBHAI PUNABHAI CHAUHAN8155848712ABHAI REVABHAI ROHIT8141143369VINSINH TAKHATSINH SOLANKI9909206108	UHAN706993734628N BHOI957430581520JBHAI SOMABHAI CHAUHAN926559830236RKUMAR J TRIVEDI990474399932VATBHAI C PARMAR875813931135OKBHAI KALABHAI CHAUHAN971455061448ISBHAI RATILAL MAKWANA760071374954UBHAI PUNABHAI CHAUHAN815584871253ABHAI REVABHAI ROHIT814114336927VINSINH TAKHATSINH SOLANKI990920610857DISHBHAI SOMABHAI MALIWAD798439649943	UHAN706993734628MN BHOI957430581520MJBHAI SOMABHAI CHAUHAN926559830236MRKUMAR J TRIVEDI990474399932MVATBHAI C PARMAR875813931135MOKBHAI KALABHAI CHAUHAN971455061448MISBHAI RATILAL MAKWANA760071374954MUBHAI PUNABHAI CHAUHAN815584871253MVINSINH TAKHATSINH SOLANKI990920610857MOISHBHAI SOMABHAI MALIWAD798439649943M

70	AXAY SURYAKANTBHAI PATEL	7096733831	31	Μ	B Positive
71	JIGNESHKUMAR K PARIKH	9724631940	38	Μ	B Positive
72	PRADIPSINH P SOLANKI	9909368796	39	Μ	A Positive
73	MAYANKKUMAR A ROHIT	9081455098	27	Μ	B Positive
74	BHARATBHAI M BARIYA	9016186124	54	М	A Positive
75	D M KUMAR	9664257846	27	М	O Positive
76	DEVENDRASINH N THAKOR	8758051762	38	М	B Positive
77	CHETNABEN GOVINDBHAI JOSHI	9427807779	46	F	B Positive
78	HITENDRASINH RATHOD	7567409716	32	Μ	B Positive
79	NIRAVKUMAR H PRAJAPATI	9978470712	36	Μ	A Positive
80	RAJENDRAKUMAR BABUBHAI TADVI	8238131629	30	Μ	B Positive
81	KAMLESHBHAI RAMESHBHAI PATEL	8469345193	38	М	AB Positive
82	HARIM PUKHJI KUMAWAT	9913822854	42	М	O Negative
83	KRUNALKUMAR DASHRATHLAL GOR	9601341811	31	M	B Positive
84	PRAVINKUMAR SOMABHAI TAVIYAD	9687104133	28	М	O Positive
85	JITENDRAKUMAR BHANUBHAI GANDHI	9979990303	37	M	B Positive
86	HARDIKUKUMAR KISHORBHAI BHOI	9099018059	34	М	B Positive
87	FULCHANDRASINH H RAHEVAR	9909895958	38	М	O Positive
88	VIPULKUMAR PRABHATKUMAR JOSHI	9898047613	44	Μ	B Positive
89	RANDHIRSINH N SISODIYA	9624021360	38	М	A Positive
90	JIGNESHKUMAR K SOLANKI	9913366973	33	Μ	B Positive
91	HASMUKHBHAI AMBALAL KHNAT	9726877257	30	Μ	B Positive
92	BALVANTBHAI R KHANT	9726944798	38	М	AB Positive
93	SHAILESHKUMAR C ZALA	8238142143	38	М	B Positive
94	ASHWINBHAI GALABHAI TAVIYAD	9978433715	37	M	A Positive
			Page1	92	

95	RAJESHKUMAR DALPATSINH CHAUHAN	9033510764	34	М	O Positive
96	BHARATSINH KADUSINH PARMAR	9726628104	34	М	A Positive
97	RAJESHKUMAR M PRAJAPATI	9726628104	34	Μ	AB Positive
98	ANANTBHAI R PATEL	9662423967	33	Μ	A Positive
99	MAHIPALSINH J BIHOLA	9408267282	46	Μ	A Positive
100	JIGARKUMAR M PARMAR	9723976263	27	Μ	A Positive
101	LILABEN P PARMAR	9934170334	43	F	AB Positive
102	DIVYANGKUMAR S KACHHIYA	9428782696	38	Μ	B Positive
103	KAMLESHBHAI B MAKWANA	9724893221	44	Μ	A Positive
104	DAXESHKUMAR S RANA	9913798913	25	Μ	O Positive
105	RAJENDRASINH B CHAMPAVAT	9924440238	50	Μ	A Positive
106	PANKAJBHAI J PATEL	9824440598	41	Μ	O Positive
107	JIGNESHKUMAR P PANCHAL	9427231067	36	М	B Positive
108	NARESHBHAI RAMANBHAI DAMOR	9773498061	31	М	AB Positive
109	YOGESHKUMAR SOMGAR GOSAI	8960618494	44	М	O Positive
110	SAMBHAVANI CHIRAG VASUDEV	9898825125	32	М	O Positive
111	KULDEEPKUMAR HARIBHAI PATEL	9879309862	38	М	B Positive
112	PRIVINBHAI JAGJIVANDASH SUTHAR	7874322077	58	М	B Positive
113	YUVRAJSINH INDRASINH ZALA	9979934953	29	М	A Negative
114	MANOJKUMAR S JAGTAP	9724726462	55	М	AB Positive
115	INDRAVADAN VALABHAI PARIKH	9327713211	69	М	B Positive
116	SAMBHAVANI VASUDEV LOKRAN	9426061413	61	М	O Positive
117	JAIMINKUMAR S BHOI	9428902034	32	М	O Positive
118	YASHPALSINH V RATHOD	9426550458	43	М	O Positive
119	BHAGVANBHAI B PATEL	9913018773	43	М	A Positive
			 Da == 1		

Roads and Buildings Sub Division (State) Lunawada- Mahisagar

Sr.No	Name of the Employee/officer	Designation	Name of Taluka	Office No
	Shri. VP Khatedia	Executive Engineer	Lunawada/	02674-250486
			Santarapur	9925048136
1	Shri V R Sathvara	Dy.Executive Engineer		02674-250076
				9978951420
	Shri K.I.Patel	Assistant Engineer		7575077470
	Ms. Malvika Chaudhary	A.Assistant Eng.	<u> </u>	9925251822
	Shri. C.K.Rathod	Sr. Clerk	<u>]</u>	7359957204
	Shri Jigneshkumar Sindhav	Jr. Clerk		7567267404
	Shri Sanjay M.Rathode	Jr. Clerk		8980045852
	Shri.V B Patel	Dy.Executive Engineer	Balasinor/ Virpur	9825075116
	Shri. Aasal Siddharaj	Assistant Engineer		8758043948
2	Shri. MK Patel	Jr.Clerk		9723237661
	Shri.S J Rajpoot	Work Assistant		7778854596
	Shri V R Sathvara	Dy.Executive Engineer	Kadana/Khanpur	9978951420
3	Shri K.I.Patel	Assistant Engineer		7575077470
	Shri B R Prajapati	Work Assistant		9727082780
	Shri R J Patel	Work Assistant	<u> </u>	7096391496

MGVCL DEPARTMENT

NAME OF		NAME OF OFFICE		PHONE NO	
NODAL OFFICER	DESI	SUB-DIVISION	STD CODE	PHONE NO.	MOBILE
SHRI AA GANCHI	EE	LUNAWADA DIVISION	02674	251640/41	9925213276
SHRI VJ MAKAWANA	DE	LUNAWADA DIVISION	02674	251640/41	9925208152
SHRI KN KAMOL	DE	LUNAWADA -I	02674	250553	9909934788
SHRI GV BAMANIYA	DE	LUNAWADA -II	02674	250153/ 254779	9925208120
SHRI HU KALAL	DE	SANTRAMPUR-I	02675	220023	9925208136 9727786901
SHRI MD RAVAL	DE	SANTRAMPUR-II	02675	220107	9978934891 9727786902
SHRI D L KHAVAR	DE	КОТНАМВА	02674	230022	9925215281
SHRI NK GARWAL	DE	KADANA SUB DIVISION	02675	237023	9925208383 9601724917
SHRI B K PATEL	DE	VIRPUR SUB DIVISION	02690	277977	9925037670
SHRI RK GOHIL	DE	BAKOR	02674	250153	9879611873

POLICE DEPARTMENT

Mahisagar district Police Officer Contact Number:

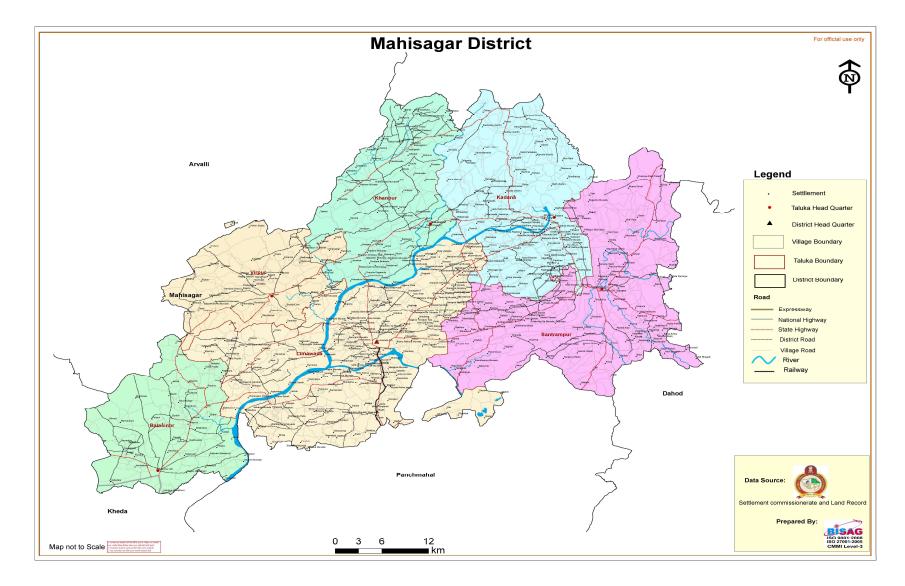
Sr.No	Name of Officer	Designation	Office No	Mobile no
1	Shri Jaydeepsinh Jadeja IPS	Superintendent of Police	02674-254001	9978405980
2	Shri J. G. Chavda	Deputy Superintendent of Police M.M. Mahisagar	02674-254002	9978408064
3	Shri. P.S.Valvi	Deputy Superintendent of Police SC/ST Cell	02674-254009	8849007909
4.	Shri Tapankumar V Dodiya	Pro.Deputy Superintendent of Police	02674-250128	8141993800
5	Shri A B Asari	Police Inspector L.C.B.	02674-254007	9687675937
6	Shri PM Makwana	Police Sub-Inspector L.C.B.		9712213721
7	Shri K C Sisodiya	Police Sub-Inspector L.C.B.		8758855355
8	Shri A B Asari	I/C Police Inspector SOG Branch	02674-25 2522	9687675937
9	Shri V D Khant	Police Sub-Inspector SOG Branch		9773460134
10	Mr. M K Khant	Police Inspector L.I.B.	02674-254006	9925777883
11	Su. Shri H. R. Vaghela	Police Sub Inspector L.I.B.		9099079931
12	Mr. M K Khant	Police Inspector Cyber Crime (i/c)		9925777883
13	Shri S K Charel	Police Sub Inspector Reader Branch	02674-254004	7567528602
14	Shri S S Patel	At. Police Sub Inspector Reader Branch		9723978856
15	Shri H B Sisodiya	Police Sub Inspector District Traffic	02674-254014	8320665009

16	Mr. B.P.Patel	Police Sub Ins Parole-Flow	02674-250128	9909033163
17	Shri D V Kharadi	Police Sub Inspector M.O.B	02674-250128	9099455598
18	Shri Vivek Bheda IPS	Assistant Superintendent of Police.]	
19	Shri K K Buval	Police Ins Santarampur .St]	9925154052
20	Shri R D Patel	Police Sub Ins Santarampur Post Sta.	026 75 -220138	9925206468
21	Shri S S Palas	Police Sub Ins Santarampur Post Sta.		9099208745
22	Shri Kamlesh Vasava	Deputy Superintendent of Police	02674-254009	9879179789
		Mahisagar		
22	Shri P R Karen	C P I Lunawada	02674-250199	9974276100
23	Shri K K Dindor	Police Inspector Lunawada Town Post	02674-250033	9979682848
		Sta.		
24	Shri A M Baria	Police Sub Inspector Lunawada Post		9925457474
		Sta.		
25	Shri R K Bharwad	Police Sub Inspector Lunawada.		9722220971
26	Shri S I Desai	Police Sub Inspector Lunawada.		9998967072
27	Ms J N Solanki	Police Inspector Mahila Post Sta.	02674-254013	9978993843
27	Ms S R Damor	Police sub Inspector Mahila Post Sta.	02674-254013	9537538300
28	Ms. Dhenu Thakar	Police Inspector Lunawada Taluka		8140841968
		Post.St.		
29	Shri L C Patel	Police Sub Inspector Lunawada Taluka		9426593638
		Post.St.		
30	Shri M S Variya	Police Sub Inspector Lunawada Taluka		9825643216
		Post.St.		

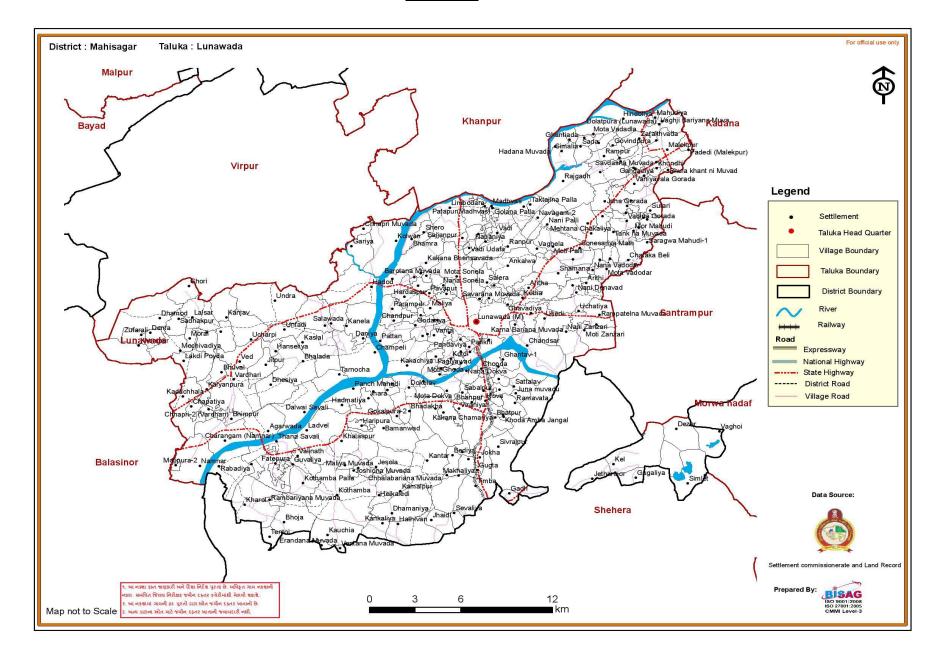
Shri H B Gameti Shri A B Devdha Shri N M Bhuriya Shri A A Ninama Shri K R Chavda	Police Inspector Kadana Post Sta.P.O. Ins.Balasinore Taluka Post.St.PSI Balasinore TalukaPolice Inspector Balasinor Town Po.St.Police Sub Inspector Balasinor Town	02675-236883 02690-297500 02690-297500 02690-297500 02690-267201	9925016918 9727736854 8141819197 9427686885
Shri N M Bhuriya Shri A A Ninama	PSI Balasinore Taluka Police Inspector Balasinor Town Po.St.	02690-297500	8141819197
Shri A A Ninama	Police Inspector Balasinor Town Po.St.		
		02690-267201	9427686885
Shri K R Chavda	Police Sub Inspector Balasinor Town		
	L L	02690-267201	6354719629
	Po.St.		
Shri J S Mahida	Police Sub Inspector Kothamba.St.	02674-230533	9724449205
Shri J K Rana	Police Sub Inspector Kothamba.St.	02674-230533	9512470027
Shri S B Zala	Police Sab Inspector Virpur	02690-277433	6352728389
Shri K M Maliwad	Police Sab Inspector Virpur Post Sta	02690-277433	8141212123
Shri C K Sisodiya	Police Sab Inspector Bakor	02674-286733	9427694470
Shri V D Dhorda	Police Sub Ins Ditwas	02675-244033	9925962399
Shri R C Solanki	Police Sub Ins Ditwas		9426970632
Shri R P Baria	P.O. W.S.I. (Netram) Workshop	02674-250128	9924928994
Shri S R Rathod	P.O. W.S.I (Wireless Division) Cypher		9925502867
Shri J K Rot	P.O. W.S.I.(Wireless) Computer		9913340814
Ms K M Rathod	Probationary Police Inspector	02674-250033	6354062561
	Lunawada		
Shri V B Bhoi	Band Police Inspector	02674-250920	8758843979
Police Control Room	02674-250128 / 250129/ 250130 Fax no. 0	02674-250816	
	Shri J K Rana Shri S B Zala Shri K M Maliwad Shri C K Sisodiya Shri V D Dhorda Shri R C Solanki Shri R P Baria Shri S R Rathod Shri J K Rot Ms K M Rathod Shri V B Bhoi	Shri J K RanaPolice Sub Inspector Kothamba.StShri S B ZalaPolice Sab Inspector VirpurShri K M MaliwadPolice Sab Inspector Virpur Post StaShri C K SisodiyaPolice Sab Inspector BakorShri V D DhordaPolice Sub Ins DitwasShri R C SolankiPolice Sub Ins DitwasShri S R RathodP.O. W.S.I. (Netram) WorkshopShri J K RotP.O. W.S.I.(Wireless Division) CypherShri J K RotProbationary Police InspectorLunawadaShri V B BhoiBand Police Inspector	Shri J K RanaPolice Sub Inspector Kothamba.St02674-230533Shri S B ZalaPolice Sab Inspector Virpur02690-277433Shri K M MaliwadPolice Sab Inspector Virpur Post Sta02690-277433Shri C K SisodiyaPolice Sab Inspector Bakor02674-286733Shri V D DhordaPolice Sub Ins Ditwas02675-244033Shri R C SolankiPolice Sub Ins Ditwas02674-250128Shri S R RathodP.O. W.S.I (Wireless Division) Cypher02674-250128Shri J K RotP.O. W.S.I.(Wireless) Computer02674-250033Ms K M RathodProbationary Police Inspector Lunawada02674-250920

ANNEXURE-9

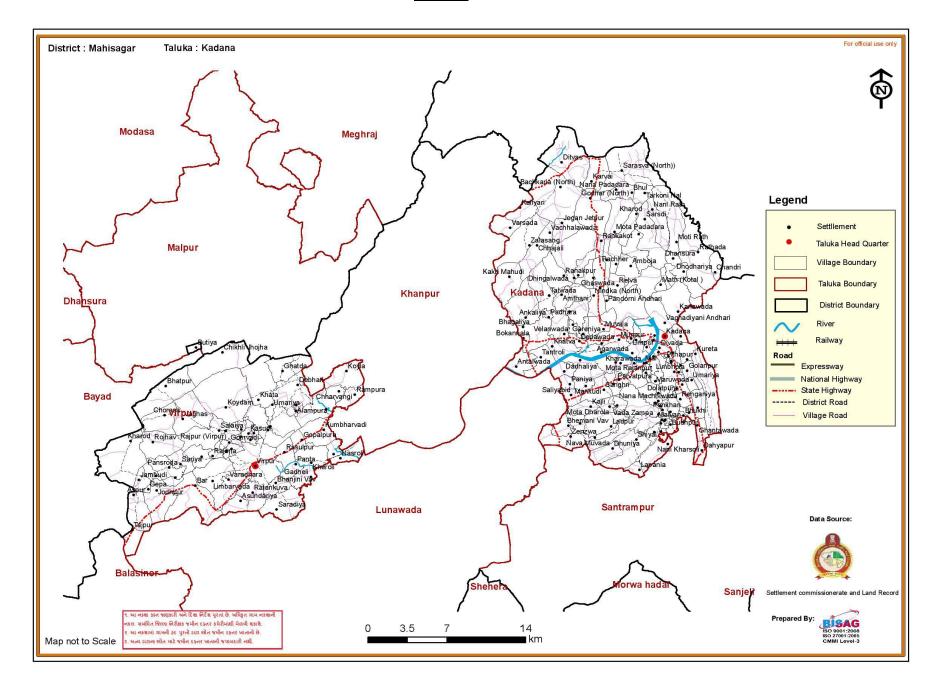
DISTRICT AND TALUKA MAPS

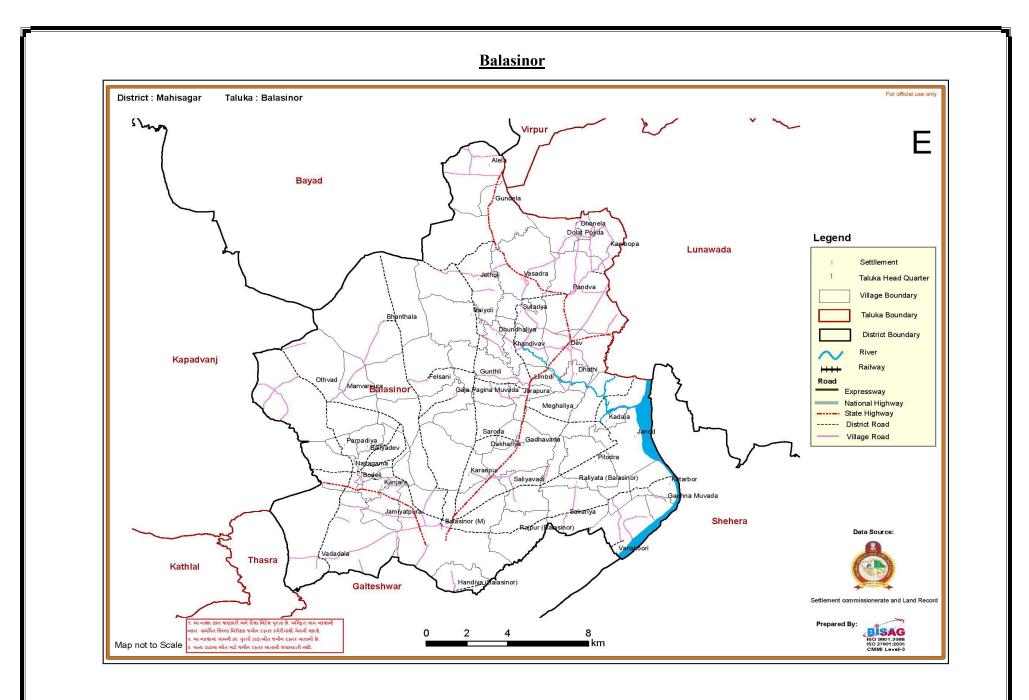


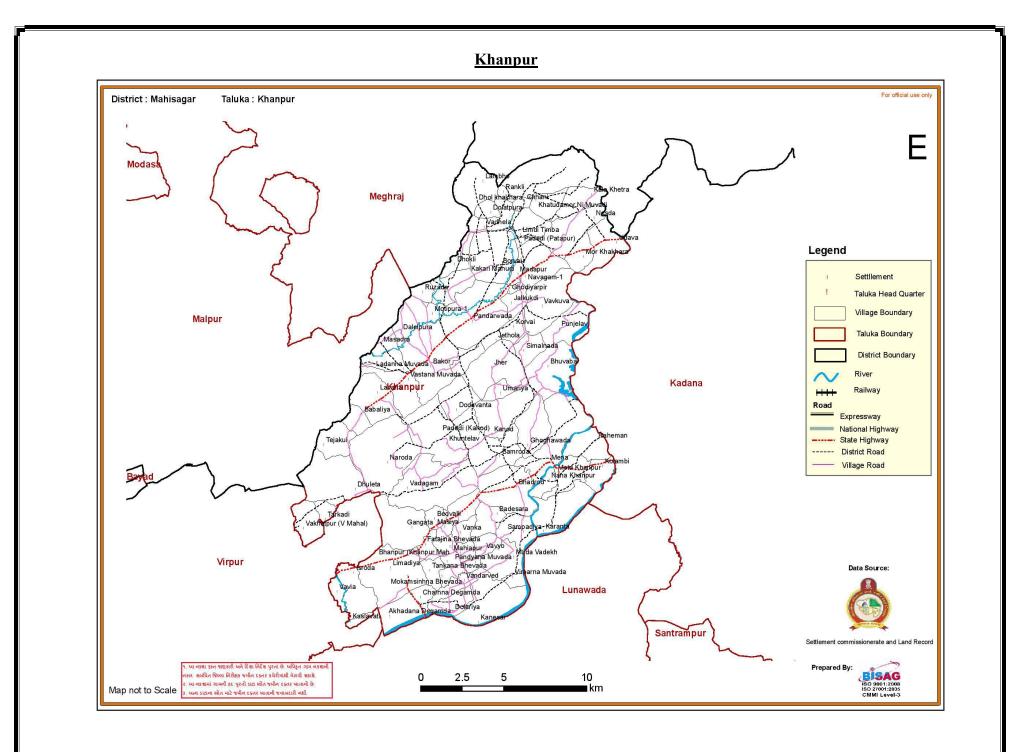
<u>Lunawada</u>

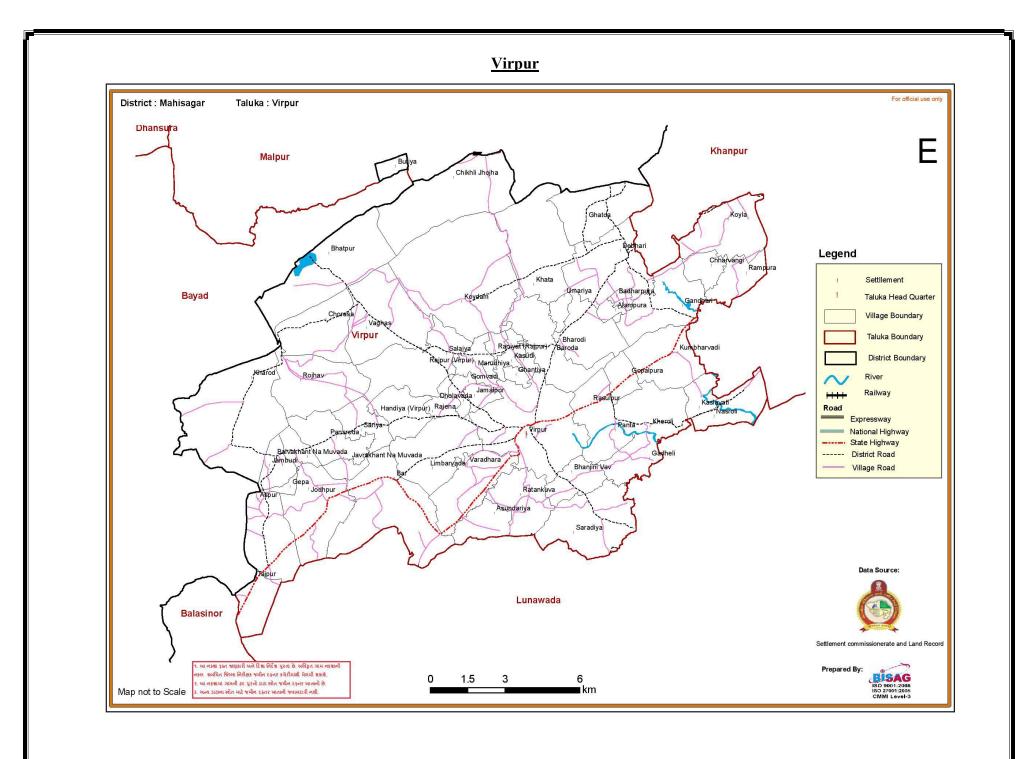


<u>Kadana</u>









Santrampur

