

District Disaster Management Plan



District Gir Somnath (Volume-2) [2019-20] Collector Office -Veraval



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DISASTER MANAGEMENT PLAN: DISTRICT-GIR SOMNATH

Preface:

In recent years, the Government of Gujarat has been giving increased focus towards the Disaster Management and related aspects. As a part of Disaster Risk Management, all the Villages, Taluka and City in the Gir Somnath district have prepared their Disaster Management Plans and will be updated every year.

The District Disaster Management Plan is a summary document giving the details about the hazards, its history, vulnerability analysis, risk assessment and flood management strategy and mitigation plan. It also outlines the flood response plan, warning system, communication system, search, rescue and relief operations and contingency plans.

While preparing a District Disaster Management Plan [DDMP] for Gir Somnath District, the data collected at various levels were collated and on top of that was added the Line department data. All this is possible with the in-house developed IT system 'State Disaster Resource Network [SDRN]' which is launched on the Gujarat State Wide Area Network [GSWAN]. It gives information access to all the officials at Taluka, District and state Secretariat level.

We have tried to include the District related information, Risks and Preparedness against risks, responses at the time of disasters as well as Disaster Management and strategy during the disaster etc for Gir Somnath District. This Plan will update periodically, and also we will improve it through our draw backs, errors and new lessons learnt.

I hope that this document shall go a long way in helping the district administration in tackling the disaster situations in a systematic and smooth manner.

Signature of District Collector

:-

Collector-Gir Somnath

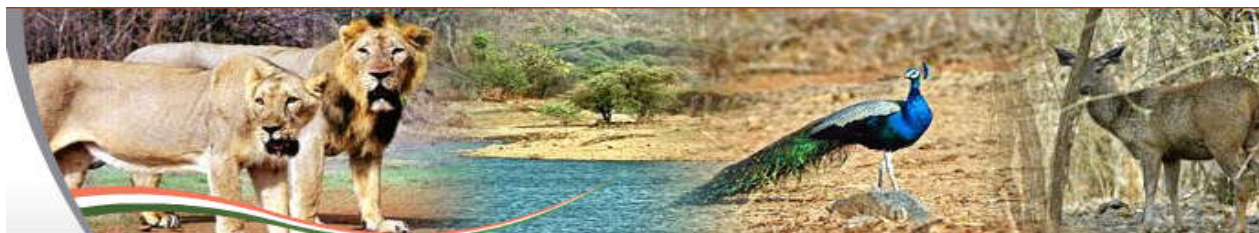
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List Of Abbreviation

<i>AIDS</i>	<i>Acquired Immune Deficiency Syndrome</i>
<i>APMC</i>	<i>Agricultural Produce Market Committee</i>
<i>AE</i>	<i>Assistant Engineer</i>
<i>AH</i>	<i>Animal Husbandry</i>
<i>ATI</i>	<i>Administrative Training Institute</i>
<i>ATS</i>	<i>Anti Terrorist Squad</i>
<i>ATVT</i>	<i>Apno Taluko Vibrant Taluko</i>
<i>BPL</i>	<i>Below Poverty Line</i>
<i>BRC</i>	<i>Block Resource Centre</i>
<i>CBO</i>	<i>Community Based Organization</i>
<i>CDHO</i>	<i>Chief District Health Officer</i>
<i>CDPO</i>	<i>Child Development Project Officer</i>
<i>CHC</i>	<i>Community Health Center</i>
<i>CRC</i>	<i>Community Resource Centre</i>
<i>CRF</i>	<i>Calamity Relief Fund</i>
<i>CSO</i>	<i>Civil Society Organization</i>
<i>DCMG</i>	<i>District Crisis Management Group</i>
<i>DDMA</i>	<i>District Disaster Management Authority</i>
<i>DDMP</i>	<i>District Disaster Management Plan</i>
<i>DDO</i>	<i>District Development Officer</i>
<i>DEOC</i>	<i>District Emergency Operation Centre</i>
<i>DGVCL</i>	<i>Dakshin Gujarat Vij Company Limited</i>
<i>DISH</i>	<i>Directorate of Industrial Safety and Health</i>
<i>DM</i>	<i>Disaster Management</i>
<i>DPO</i>	<i>District Project Officer</i>
<i>DRM</i>	<i>Disaster Risk Management</i>
<i>DRR</i>	<i>Disaster Risk Reduction</i>
<i>DSO</i>	<i>District Sports Officer</i>
<i>DSP</i>	<i>Deputy Superintendent of Police</i>
<i>Dy. Eng.</i>	<i>Deputy Engineer</i>
<i>Dy SP</i>	<i>Deputy Superintendent of Police</i>
<i>EMRI</i>	<i>Emergency Management & Research Institute</i>
<i>ESR</i>	<i>Elevated Surface Reservoir</i>
<i>EWS</i>	<i>Early Warning System</i>
<i>Ex. Eng.</i>	<i>Executive Engineer</i>
<i>FCI</i>	<i>Food Corporation of India</i>
<i>FPS</i>	<i>Fair Price Shop</i>
<i>FWP</i>	<i>Food for Work Program</i>
<i>GDCR</i>	<i>General Development Control Regulation</i>
<i>GEB</i>	<i>Gujarat Electricity Board</i>
<i>GIDM</i>	<i>Gujarat Institute of Disaster Management</i>
<i>GLR</i>	<i>Ground Level Reservoir</i>
<i>GMB</i>	<i>Gujarat Maritime Board</i>
<i>GoI</i>	<i>Government of India</i>
<i>GPs</i>	<i>Gram Pranchayats</i>
<i>GSDMA</i>	<i>Gujarat State Disaster Management Authority</i>
<i>GWSSB</i>	<i>Gujarat Water Supply and Sewerage Board</i>

HFA	Hyogo Framework for Action
HHs	Households
HPC	High Powered Committee
HQ	Head Quarter
HRVC	Hazard, Risk, Vulnerability and Capacity
IAY	Indira Aawas Yojana
IMA	Indian Medical Association
ICS	Incident Commander
ICS	Incident Command System
IDNDR	International Decade for Natural Disaster Reduction
IEC	Information Education Communication
IMD	Indian Meteorological Department
ISDR	International Strategy for Disaster Reduction
ISR	Institute for Seismic Research
ITI	Industrial Training Institute
IWMP	Integrated Watershed Management Program
LCMG	Local Crisis Management Group
LO	Liaison Officer
MAH	Major Accident Hazard
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MHA	Ministry of Home Affairs
MLA	Member of Legislative Assembly
Mm	Mili Meter
MP	Member of Parliament
NAPCC	National Action Plan on Climate Change
NCC	National Cadets Corps
NCCF	National Calamity Contingency Fund
NDM	National Disaster Management
NDMA	National Disaster Management Authority
NDRF	National Disaster Response Force
NDRF	National Disaster Response Force
NEC	National Executive Committee
NFSM	National Food Security Mission
NGO	Non Government Organization
NIDM	National Institute of Disaster Management
NRDWP	National Rural Drinking Water Program
NRHM	National Rural Health Mission
NSS	National Service Scheme
NYK	National Yuva Kendra
PCPIR	Petroleum Chemical and Petrochemical Special Investment Region
PDS	Public Distribution System
PHC	Primary Health Center
PI	Police Inspector
PMGY	Pradhan Mantri Gramodyan Yojna
PRIs	Panchayati Raj Institutions
R & R	Recovery & Reconstruction
R&B	Roads & Buildings
RTO	Regional Transport Office

SC	Scheduled Caste
SDM	Sub District Magistrate
SDMA	State Disaster Management Authority
SDRF	State Disaster Response Fund
SDRN	State Disaster Response Network
SE	Superintending Engineer
SEOC	State Emergency Operation Centre
SFO	Sub Focal Officer
SEZ	Special Economic Zone
SHGs	Self Help Groups
SMC	School Management Committee
SMS	Short Message Service
SOP	Standard Operating Procedure
SRPF	State Reserve Police Force
SRT	Special Response Team
SSA	Sarva Shiksha Abhiyan
ST	Scheduled Tribe
S& R	Search and Rescue
Supt. Eng.	Superintendent Engineer
SWO	Social Welfare Officer
TDMA	Taluka Disaster Management Authority
TDMC	Taluka Disaster Management Committee
TDMP	Taluka Disaster Management Plan
TDO	Taluka Development Officer
TEOC	Taluka Emergency Operation Centre
THO	Taluka Health Officer
TNA	Training Needs Assessment
TSC	Total Sanitation Campaign
TSO	Taluka Supply Officer
ULB	Urban Local Body
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
VDMP	Village Disaster Management Plan
VIPs	Very Important Persons
VVIPs	Very Very Important Persons
WASMO	Water and Sanitation Management Organization



History of past disasters

Historical records of 11 most devastating cyclones which formed in the Arabian Sea and made landfall on the West coast of India

S.No.	Date/Year	Type of Disturbance	Landfall and Relevant Information
1.	16, May 1618	Severe Cyclonic Storm	Crossed Bombay Loss and damage: People killed=2,000
2.	30 October-2 November, 1854	Severe Cyclonic Storm	Crossed Bombay coast on 1 November Loss and damage: People killed=1,000 Property worth crores of rupees perished within four hours
3.	18-23 November, 1948	Severe Cyclonic Storm	Crossed coast near Virar, 72 km North of Bombay at about 0830 hrs IST on 22 November. Maximum wind: Colaba recorded 120 kmph (65 kts) and Juhu recorded 151 Kmph (81 kts) Loss and damage: Great havoc and heavy loss of life and property and all means of traffic and communication were completely paralysed for two days. A number of small vessels and crafts capsized in the water of the Bombay harbour. Thousands of big trees uprooted and hundred of buildings and hutments were rendered uninhabitable
4.	23-25 May, 1961	Severe Cyclonic Storm	Crossed coast near Devgad on the night of 24 to 25 May Loss and damage: 5 lakh fruit trees were reported to have been razed to the ground.1,700 houses completely and 25,000 houses partially damaged
5.	9-13 June, 1964	Severe Cyclonic Storm	Crossed coast just west of Naliya during the late forenoon on 12 June Maximum wind: Naliya recorded 135 kmph (73 kts);Dwarka recorded 105 kmph (57 kts); Porbandar recorded 74 kmph (40 kts); Veraval recorded 83 kmph (45 kts);

			Surge height: 2m at Kandla Loss and damage: People killed=27
6.	19-24 October, 1975	Very Severe Cyclonic Storm*	Crossed Saurashtra coast about 15 km to the northwest of Porbandar at 1500 hours IST of 22 October Maximum wind: Jamnagar recorded 160-180 kmph (86-97 kts) and Porbandar recorded 110 kmph (59 kts) Surge height: 4-6 m at Porbandar and Okha Intensity: T 6.0 Loss and damage: People killed=85; Several thousands of houses were damaged; Many trees/ electric/telephone poles/roof tops blew; A train was also blown off its rails; loss of property was estimated to be Rs. 75 crores
7.	31 May-5 June, 1976	Severe Cyclonic Storm	Crossed Saurashtra coast near Bhavnagar on 3 June Maximum wind: Ship HAAKON magnus reported 167 kmph (90 kts) Loss and Damage: People Killed=70; Cattleheads lost=4,500; Houses Damaged=25,000; Damage estimated to be Rs. 3 crores
8.	13-23 November, 1977	Very Severe Cyclonic Storm*	Crossed between Mangalore and Honavar in the early morning of 22 November Intensity: T 5.5 Loss and Damage: People killed=72; 8,400 houses totally and 19,000 houses partially damaged; Loss estimated to be Rs. 10 crores
9.	4-9 November, 1982	Very Severe Cyclonic Storm*	Crossed Saurashtra coast, about 45 km east of Veraval on 8 November Loss and Damage: People killed=507 Livestock perished=1.5 lakh; Thousands of houses collapsed
10.	17-20 June, 1996	Severe Cyclonic Storm	Crossed south Gujarat coast between Veraval and Diu in the early morning of 19 June Intensity: T 3.5 Maximum wind: Veraval recorded 86 kmph (46 kts) at 0430 hrs IST of 19 June Storm surge: 5 – 6 m near Bharuch Loss and Damage: People killed=47 Cattleheads perished=2113; no of houses damaged=29,595; loss of Property=Rs. 1805 lakhs
11.	4-10 June, 1998	Very Severe Cyclonic Storm*	Crossed Gujarat coast near Porbandar between 0630 and 0730 hrs IST of 9 June Intensity: T 5.0

			<p>Maximum Wind: Jamnagar recorded 182 kmph (98 kts) at 0730 hrs IST of 9 June</p> <p>Surge Height: 2-3 m above the astronomical tide of 3.2 m;</p> <p>Loss and Damage: People killed=1173; People missing=1774</p> <p>Loss of property worth to be Rs. 1865.38 crore</p>
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* Severe Cyclonic Storm with core of hurricane winds as per earlier categoriz

Historical records of 12 most devastating cyclones, which formed in the Bay of Bengal and made landfall on the East coast of India

















S.No	Date/ Year	Category of cyclone	Landfall and Relevant Information
1.	7-12 October, 1737	Super Cyclone*	Crossed West Bengal coast over Sunderbans Surge height: 12 m Loss of life: 300,000
2.	31 October, 1831	Very Severe Cyclonic Storm*	Crossed Orissa coast near Balasore Surge Height: 2-5 m Loss and Damage: People Killed=22,000, Cattleheads lost=50,000
3.	2-5 October, 1864	Very Severe Cyclonic Storm*	Cross the coast near Contai, West Bengal Surge Height: The wave in many places rose to 9 m The Maximum height of the waves reached 12 m At Sagar Island it was 5 m above land level. At Diamond Harbour, the wave was 3 m Loss and Damage: People Killed=50,000 (mostly due to drowning), and 30,000 (due to diseases as a result of inundation)
4.	1-2 November, 1864	Severe Cyclonic Storm*	Crossed Andhra Pradesh coast near Machili-patnam Surge-Height: 4 m Loss and Damage: People Killed=30,000
5.	22 September, 1885	Super Cyclone*	Crossed Orissa coast at False Point, Central pressure: 919 hPa, Surge Height: 7 m Loss of Life: 5000
6.	14-16 October, 1942	Severe Cyclonic Storm	Crossed West Bengal coast near Contai Surge Height: 3-5 m Loss and Damage: People Killed=19,000, Cattleheads killed=60,000
7.	8-11 October, 1967	Severe Cyclonic Storm	Crossed Orissa coast between Puri and Paradip on the morning of 9 October and then crossed Bangladesh coast during the night of 10-11 October Loss and Damage: People Killed=1,000, Cattleheads lost=50,000; property of few crores of rupees


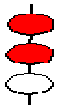




			damaged
8.	26-30 October, 1971	Severe Cyclonic Storm	Crossed Orissa coast near Paradip early morning of 30 October Maximum Wind: 150-170 kmph (81-92 kts) Surge height: 4-5 m, north of Chandbali Loss and Damage: People killed=10,000; Cattleheads lost=50,000; Houses damaged=8,00,000
9.	14-20 November, 1977	Super Cyclone*	Crossed Andhra coast near Nizamparnam at 1730 IST on 19 November Maximum wind: Ongole recorded 102 kmph (55 kts); Machilipatnam recorded 120 kmph (65 kts); Gannavaram recorded 139 kmph (75 kts) Surge Height: 5 m Intensity: T 7.0 Maximum estimated wind speed: 260 kmph (140 kts) Loss and Damage: People killed=10,000; Cattleheads lost=27,000; Damage to crops and other property was estimated to be around Rs. 350 crores.
10.	4-11 May, 1990	Super Cyclone*	Crossed Andhra coast at about 40 km south west of Machilipatnam around 1900 IST of 9 May Maximum wind: Machilipatnam recorded 102 kmph (55 kts); Gannavaram recorded 93 kmph (50 kts) Surge height: 4-5m Intensity: T 6.5 Maximum estimated wind speed : 235 kmph (126 kts) Loss and damage: People killed=967; the estimated cost of the damages to crops and properties= Rs.2,248 crore
11.	5-6 November, 1996	Very Severe Cyclonic Storm*	Crossed Andhra coast near Kakinada at midnight of 6 November Maximum wind: 200 kmph (108 kts) Surge height: 3-4 m Loss and damage: People killed=2000; People missing=900;crops destroyed in 3,20,000 hectares of land; house destroyed=10,000 Estimate of the loss for crops= Rs.150 crores

12.	25-31 November, 1999	Super Cyclone	<p><i>Crossed Orissa coast near Paradip at noon of 29 October</i></p> <p>Maximum wind: 260 kmph (140 kts); Bhubaneshwar recorded 148 kmph (80 kts)</p> <p>Surge height : 6-7m</p> <p>Intensity : T 7.0</p> <p>Loss and damage : People killed=8,960; People injured = 2,142; cattleheads perished=3,70,297;</p> <p>Paddy crops in 16,17,000 hectares and other crops in 33,000 hectares damaged.</p>
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** Severe Cyclonic Storm with core of hurricane winds as per earlier categorization*

Information of warning Signals for cyclone

PORT STORM WARNING SIGNAL NO.	DAY SIGNAL	NIGHT SIGNAL	MEANING
1			<i>DISTANT CAUTIONARY (There is a region of squally weather in which a storm may be forming.)</i>
2			<i>DISTANT WARNING (A storm has formed.)</i>
3			<i>LOCAL CAUTIONARY (The port is threatened by squally weather.)</i>
4			<i>LOCAL WARNING (The port is threatened by a storm but it does not appear that the danger is as yet sufficiently great to justify extreme measures of precaution.)</i>
5			<i>DANGER (The port will experience severe weather from a cyclone expected to move keeping the port to the left of its track.)</i>
6			<i>DANGER (The port will experience severe weather from a cyclone expected to move keeping the port to the right of its track.)</i>
7			<i>DANGER (The port will experience severe weather from a cyclone expected to move over or close to the port.)</i>
8			<i>GREAT DANGER (The port will experience severe weather from a severe cyclone expected to move keeping the port to the left of its track.)</i>

9			<i>GREAT DANGER (The port will experience severe weather from a severe cyclone expected to move keeping the port to the right of its track.)</i>
10			<i>GREAT DANGER (The port will experience severe weather from a severe cyclone expected to move over or close to the port.)</i>
11			<i>FAILURE OF COMMUNICATIONS (Communications with the Meteorological Warning center have broken down and the local officer considers that there is danger of bad weather.)</i>

Chapter -1 Introduction

• Introduction:

The Government of Gujarat has envisaged the development of a holistic approach designed to manage disasters on a more proactive basis. The approach involves formulating a comprehensive policy on all phases of disaster management, and addresses the entire gamut of disasters arising from natural and manmade causes.

District Administration is primarily responsible for disasters/crisis management including prevention and mitigation. The existing Circulars of State Relief Manual guides the entire process of administration for relief and recovery in the State. These Circulars mainly address post-disaster events and the scope is limited to some of the natural hazards – floods, droughts & earthquake.

The Gir Somnath District is prone to many natural and man-made disasters. Natural disaster vulnerability of the District is presented in the Vulnerability Atlas of Gujarat prepared by GSDMA (Gujarat State Disaster Management Authority). The Atlas covers hazard vulnerability of the District to flood, wind and earthquakes.

➤ Aims and Objective:

The aims and objectives of the Plan is to minimize the loss of lives and social, private and community assets because of natural and manmade disasters –

- 1. To assess the risks and vulnerabilities associated with various disasters.*
- 2. To develop appropriate disaster prevention and mitigation strategies.*
- 3. To provide clarity on roles and responsibilities for all stakeholders concerned with disaster management so that disasters can be managed more effectively.*
- 4. To develop and maintain arrangements for accessing resources, equipment, supplies and funding in preparation for disasters that might occur.*
- 5. To ensure that arrangements are in place to mobilize the resources and capability for relief, rehabilitation, reconstruction and recovery from disasters.*
- 6. To create awareness and preparedness and provide advice and training to the agencies involved in disaster management and to the community.*
- 7. To strengthen the capacities of the community and establish to maintain effective systems for responding to disasters.*

8. *To carry out restoration and rehabilitation measures soon after the disaster strikes.*

➤ ***Evolution of the Plan***

District Administration prepares plan using guidelines & ensures that these are constantly reviewed and updated. Gir Somnath District prepared in advance, designate evacuation areas for use in emergencies and defines plans for providing essential services to those areas, when in use.

While preparing a District Disaster Management Plan for Gir Somnath District, the data collected at various levels were collated and on top of that was added with the Line department data. All this is made available with the in-house developed IT system 'State Disaster Resource Network [SDRN]'. It gives information access to all the officials at Taluka, District and state Secretariat level.

➤ ***How to use the Plan & District Plan Approach***

The aim of the plan is to establish necessary systems, structures, programs, resources, capabilities and guiding principles for reducing disaster risks and preparing for and responding to disasters and threats of disasters in respective district, in order to save lives and property, avoid disruption of economic activity and damage to environment and to ensure the continuity and sustainability of development.

The district disaster management plan has a holistic and integrated approach with emphasis on prevention, mitigation and preparedness by ensuring that Disaster Management receives the highest priority at all levels in the district. It has a paradigm shift, similar to the lines of national and state level, from reactive and relief centric approach to disasters. The approach is aimed to conserve developmental gains and also minimize losses to lives, livelihood and property.

For efficient execution of the District Disaster Management Plan, the Plan has been organized as per these four stages of the Disaster Cycle.

The District Disaster Management Plan can be utilised but not limited for:

- 1. To integrate disaster risk reduction into sustainable development policies and planning;*
- 2. To develop and strengthen institutional mechanisms and capacities to build resilience to hazards;*
- 3. To systematically incorporate all international, regional, national and local disaster risk reduction strategies and approaches into the implementation of emergency preparedness, response and recovery.*
- 4. To achieve a comprehensive, all hazard, all agencies approach by achieving the right balance of prevention, preparedness, mitigation, response and recovery;*
- 5. Prepare communities to ensure that they are fully equipped to anticipate and respond to disaster events.*
- 6. To promote a transparent, systematic and consistent approach to disaster risk assessment and management.*
- 7. A multi-stakeholder participatory approach including community participation at all levels*
- 8. Develop a database and information exchange system at regional level.*

➤ ***Authority for the plan***

The Gujarat State Disaster Management Act of 2003 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, which affect a district, with support from GSDMA, the relief commissioner and other public and private parties as, may be needed.

1.5 Stakeholders and their responsibilities

The roles, responsibilities and obligation of the Collector Shri and other Stakeholders are set out in detail in the Act and are considered as part of this plan.

Clause 26 of Chapter X. (THE GUJARAT STATE DISASTER MANAGEMENT ACT, 2003)

(1) *Each department of the Government in a district shall prepare a disaster management plan for the district and the Collector shall ensure that such plans are integrated into the disaster management plan for the whole of the district.*

(3) *A department of the Government shall subject to the supervision of the Collector*

-

(a) prepare a disaster management plan setting out the following, namely :-

(i) the manner in which the concept and principles of disaster management are to be applied in the district;

(ii) role and responsibilities of the department of Government in terms of the disaster management plan of the State;

(iii) role and responsibilities of the department of Government regarding emergency relief and post disaster recovery and rehabilitation;

(iv) capacity of the department of Government to fulfill its roles and responsibilities;

(v) particulars of disaster management strategies; and

(vi) contingency strategies and emergency procedures in the event of a disaster, including measures to finance the strategies;

➤ ***Approval of the Plan***

The Line Departments and other Stake Holders of District submits a copy of its disaster management plan, and of any amendment thereto to the Collector for Approval of that Plan.

The Collector shall submit a copy of the district disaster management plan, and of any amendment thereto to the State Disaster Management Authority and the Relief Commissioner for Approval of the Plan.

➤ **Plan review and updation**

The Line Departments and other Stake Holders of Distirct should: regularly review and update the Plan and submit a copy of its disaster management plan, and of any amendment thereto to the Collector. The Same Compiled DDMP document should: regularly update and submits updated copy to Disaster Management Authority and State Relief Commissioner for Review.

Normally, The District Disaster Management Plan of District is updated twice in a year for Review and Updation. It is likely to be prepared in Pre-Monsoon phase in month of May and it is updated in Post Monsoon phase likely tobe in month of November every year.

CHAPTER – 2 - Hazard Vulnerability and Risk Assessment:

- Vulnerability Assessment and Risk Analysis Of District :**

The threat (risk) and possible impact (vulnerability) which can be actualized from these hazards ranges from minor impacts affecting one village to events impacting to larger area.

The table below summarizes the results of an analysis of hazard, risk and disaster impact in Gir Somnath District. This analysis indicates that disaster planning at the Gir Somnath district level should first focus on the functional response to the High winds and Earthquake. The functional responses to these events have links to the response to floods, storms and dam failure. Typical responses to these disaster events also can apply to fire, industrial accidents, failure of critical infrastructure and building collapse.

Hazards	Probability Rating	Impact Rating	Vulnerability Ranking	Vulnerable Areas / Talukas
Earthquake	3	5	15 (High)	Zone- III : Entire District
High Wind	3	4	12 (High)	Veraval, Una, Kodinar, Sutrapada.
Flood	3	3	9 (Moderate)	Veraval, Kodinar, Una
Fire	3	3	9 (Moderate)	Veraval, Talala.
Sea Surge	4	2	8 (Moderate)	Veraval, Una, Kodinar, Sutrapada.
Industrial Accidents	3	2	6 (Moderate)	Veraval, Sutrapada & Kodinar.
Drought	2	3	6 (Moderate)	Entire District
Food Poisoning	2	2	4 (Low)	Any Where in District
Civil Unrest	2	2	4 (Low)	Any Where in District
Epidemics	2	2	4 (Low)	Any Where in District
Building Collapse	2	1	2 (Low)	Any Where in District
Boat Sinking	2	1	2 (Low)	Veraval, Una, Kodinar Taluka
Animal Disease	1	2	2 (Low)	Any Where in District
Dam Failure	1	1	1 (Low)	Any Where at Dam sites

- District's Hazard History, Last Impact and Area Affected :**

Gir Somnath has been traditionally vulnerable to natural disasters on account of its unique geo-climatic conditions. Floods, Drought, Cyclones and Earthquake have been recurrent phenomena. Entire District Fall in to Seismic Zone-III for Earth Quack including active Fault Line at Talala and Una, 4 Costal Talukas are prone to Cyclone, 5 Talukas are Prone to Flood, and Entire District is also susceptible to drought.

Sr.	Type of Disaster	Last Impact Month / Year	Intensity	Affected Area / Taluka
1	Earthquake	January-2001	Medium	Kodinar, Una, Sutrapada, Veraval Talala.
2	Flood	June-2005	Heavy	Una, Veraval, Talala, Kodinar.
3	Cyclone	November-1982	Heavy	Veraval, Sutrapada, Kodinar, Una.
4	Heavy Rain	July-2009	Medium	Veraval
5	Drought	1999	Medium	Entire District
6	Fire	November-2009	Light	Talala.
7	Heat Wave	May-2010	Light	Talala
8	Cold Wave	January-2008	Light	Talala
9	Accident	October-2009	Medium	N.H. 8-D, 8-E and State Highways
10	Food Poisoning	January-2010	Medium	Veraval, Una.
11	Boat Sinking	November-2009	Light	Una, Veraval
12	Civil Unrest	February-2002	Light	Una, Sutrapada, Kodinar, Veraval.

- **Details of Last Disaster Strikes at Gir Somnath District.**

- **1. Earthquake (January-2001)**

After Earthquake-2001 Relief given to Total 156 Houses under G5 Category for Reconstruction in Gir Somnath District viz. Kodinar (R)-10, Kodinar (U)-78, Sutrapada (R)-4, Una (R)-33, Una (U)-30, Veraval (U)-1.

Recently an Earthquake of Magnitude 5.3 was strikes on 20th October – 2011 at 10:48 PM. Epicentre was identified at 13 km SE of Sasangir, in Talala Taluka. Earthquake was felt in major parts of the District. Total 6 Persons were injured due to earthquake in Talala and Veraval Taluka. Total 486 Tent were distributed to structurally damaged houses as an immediate relief. Total 3980 Houses of 27 Villages from 4 Taluka, were surveyed by different Teams and Relief were distributed to Total 2341 Beneficiaries as per following Table.

Sr.	Taluka	Affected Village	Surveyed House	Relief Given	Tent Distributed
1	Talala	15	3946	2315	486
2	Sutrapada	8	28	20	0
3	Veraval	3	5	5	0
4	Una	1	1	1	0
	Total	27	3980	2341	486

- **2. Flood (June-2005)**

In Year 2005 most of Talukas were affected due to Flood. Damage Report for Effected Taluka, Population, Evacuation, Human-Animal Death, Houses Collapse, Cash Doles and House Hold Relief is as below.

Total Affected Taluka - 5, Affected Villages - 128, Affected Population - 13660.

Total Relief Centres - 12, Total Persons got Shelter - 2994

Total Human Death - 11, Total Animal Death - 67

House Collapse - Huts-2, Pucca House- 9, Kachcha House- 91

House Damaged - Pucca House-99, Kachcha House- 1350

Cash Doles given to Persons – 5, Food Packet Distributed - 5400

House Hold Relief given to - Families-1721, Persons- 6885

Damage of Public Infracture (in Lakh Rs.): Road-609.62, Electricy-21.51, Water Supply-20.00, Agriculture-274.00, Port-1.55, Irrigation-196.20.

- **3. Cyclone (November-1982)**

The Severe Cyclonic Storm over the Arabian sea Sticks on November 4 to 9, 1982. Observed / Estimated Max. Wind after Landfall was 50 Knots - 93 Kmph. Saurashtra Coast of Gujarat about 45 km east of Veraval was affected very much by this storm. 507 people died and 1.5 lakh livestock perished. 50 fisher men were reported missing in Gujarat Coast.

In meteorology, a cyclone is an area of closed, circular fluid motion rotating in the same direction as the Earth. This is usually characterized by inward spiralling winds that rotate counter clockwise and clockwise of the Earth. Most large-scale cyclonic circulations are centred on areas of low atmospheric pressure. The largest low-pressure systems are cold-core polar cyclones and extra tropical cyclones which lie on the synoptic scale.

At a community level, the GSDMA has proposed to provide temporary cyclone shelter. Till 56 identified sites to construct Cyclone Shelter on Costal Belt of Gir Somnath District Veraval, Sutrapada, Kodinar & Una Block. These shelters will be, with built-in safety against high wind velocity and heavy rainfall and within easy reach of the people most affected. Educational buildings or places of worship may also be designed as cyclone shelters, for evacuation and temporary occupation.



MPCS (Una Block)

(MPCS)Village Meeting

(MPCS)

- **4. Heavy Rain (July-2009)**

In Year 2009, Veraval- Sutrapada- Una were affected due to Heavy Rain. Damage Report for Human-Animal Death, Houses Collapse, Cash Doles and House Hold Relief is as below.

Total Affected Taluka - 5, Total Human Death - 6, Total Animal Death - 45

Cash Doles given to Persons – 3672 (Rs.2.07 Lakh) for Veraval.

House Hold Relief given to - Families-24895 (Rs. 275.96 Lakh) for Veraval

House Damaged - Fully- 17, Partial- 905

Total Persons Shifted at Shelter - 10470

Total Relief Camp-5, Food Packets Distributed – 37945

- **5. Drought (1999)**

Drought occurs in 1999 for District and Half Scarcity was declared for all Talukas of Gir Somnath.

- **6. Fire (November-2009)**

Due to the large area Surrounded by Forest of Talala & Gir Gadhda are likely to be affected in Fire most frequently. To mitigate against Fire in urban Area, GSDMA have Supplied Water Browsers and Mini Fire Tenders to Nagar Palikas of Gir Somnath District.

- **7. Heat Wave**

A Heat Wave is a period of abnormally high temperatures, more than the normal maximum temperature that occurs during the summer season in the North-Western parts of India. Heat Waves typically occur between March and June, and in some rare cases even extend till July. The extreme temperatures and resultant atmospheric conditions adversely affect people living in these regions as they cause physiological stress, sometimes resulting in death.

The Indian Meteorological Department (IMD) has given the following criteria for Heat Waves :

- *Heat Wave need not be considered till maximum temperature of a station reaches atleast 40°C for Plains and atleast 30°C for Hilly regions*

- When normal maximum temperature of a station is less than or equal to 40°C Heat Wave Departure from normal is 5°C to 6°C Severe Heat Wave Departure from normal is 7°C or more
- When normal maximum temperature of a station is more than 40°C Heat Wave Departure from normal is 4°C to 5°C Severe Heat Wave Departure from normal is 6°C or more
- When actual maximum temperature remains 45°C or more irrespective of normal maximum temperature, heat waves should be declared. Higher daily peak temperatures and longer, more intense heat waves are becoming increasingly frequent globally due to climate change. India too is feeling the impact of climate change in terms of increased instances of heat waves which are more intense in nature with each passing year, and have a devastating impact on human health thereby increasing the number of heat wave casualties.

Higher daily peak temperatures and longer, more intense heat waves are becoming increasingly frequent globally due to climate change. India too is feeling the impact of climate change in terms of increased instances of heat waves which are more intense in nature with each passing year, and have a devastating impact on human health thereby increasing the number of heat wave casualties.

Health Impacts of Heat Waves

The health impacts of Heat Waves typically involve dehydration, heat cramps, heat exhaustion and/or heat stroke. The signs and symptoms are as follows:

- Heat Cramps: Edema (swelling) and Syncope (Fainting) generally accompanied by fever below 39°C i.e. 102°F.
 - Heat Exhaustion: Fatigue, weakness, dizziness, headache, nausea, vomiting, muscle cramps and sweating.
 - Heat Stroke: Body temperatures of 40°C i.e. 104°F or more along with delirium, seizures or coma. This is a potential fatal condition
- **(May-2010)**

Heat Wave conditions were prevailed in parts of Saurashtra including Gir Somnath for more than 10 days in the month of May holding the Maximum Temperature was more on 40° Centigrade. Highest Temperature for Talala was Recorded 44.7 on 20th May-10 and Minimum Temperatures was also at near Normal of around 23 to 27 Degrees in most parts of District.

• **8. Cold Wave (January-2008)**

Gir Somnath and Many parts of Saurashtra had experienced Severe Cold Wave for continuous 12 days. The Severe Cold Wave had abated and the Average Minimum Temperature was 7.3 Degrees. The Cold Wave was due to intense cold weather in Afghanistan and Pakistan. This was the reason for Temperatures in Gir Somnath went below that in Saurashtra.

- **9. Accident (August-2012)**

Veraval, Una, Sutrapada and Kodinar Talukas are on N.H. 8-D, 8-E and State Highways which considered as an Accident Prone Zone for Gir Somnath District. Due to Accident 4 Death and 17 injured at Malgam of Kodinar in August-2012.

- **10. Food Poisoning (January-2010)**

Major Food Poisoning Cases were handled by Health Department and Administration at MDM Centre Navadra of Veraval and MDM Centre of Dudhala of Una Taluka.

- **11. Boat Sinking (November-2009)**

Due to Cyclone "Phayan", all Fishermen were called to return back on port. 2 Boats Named Siv-Sagar (VRC-8497) and Vishwanath (VRC-6618) were Damaged and Sink but all sailors on that boats were safely reach on cost of Veraval and Nava Bandar of Una.

- **12. Civil Unrest (February-2002)**

After Godhara Communal Riots; Una, Sutrapada, and Kodinar were slightly affected. 1 Death was occur at Una, 9 Beneficiaries were given Financial Assistance for House Damage, 42 Persons were given Financial Assistance for Damage in Professional Equipments and 14 persons were benefited for House Hold Assistance.

There was also an incident of civil unrest reported on 22nd, June 2013 at Satta Bazar and Minarva Chock of Veraval City.

CHAPTER - 3

Institutional Arrangements:

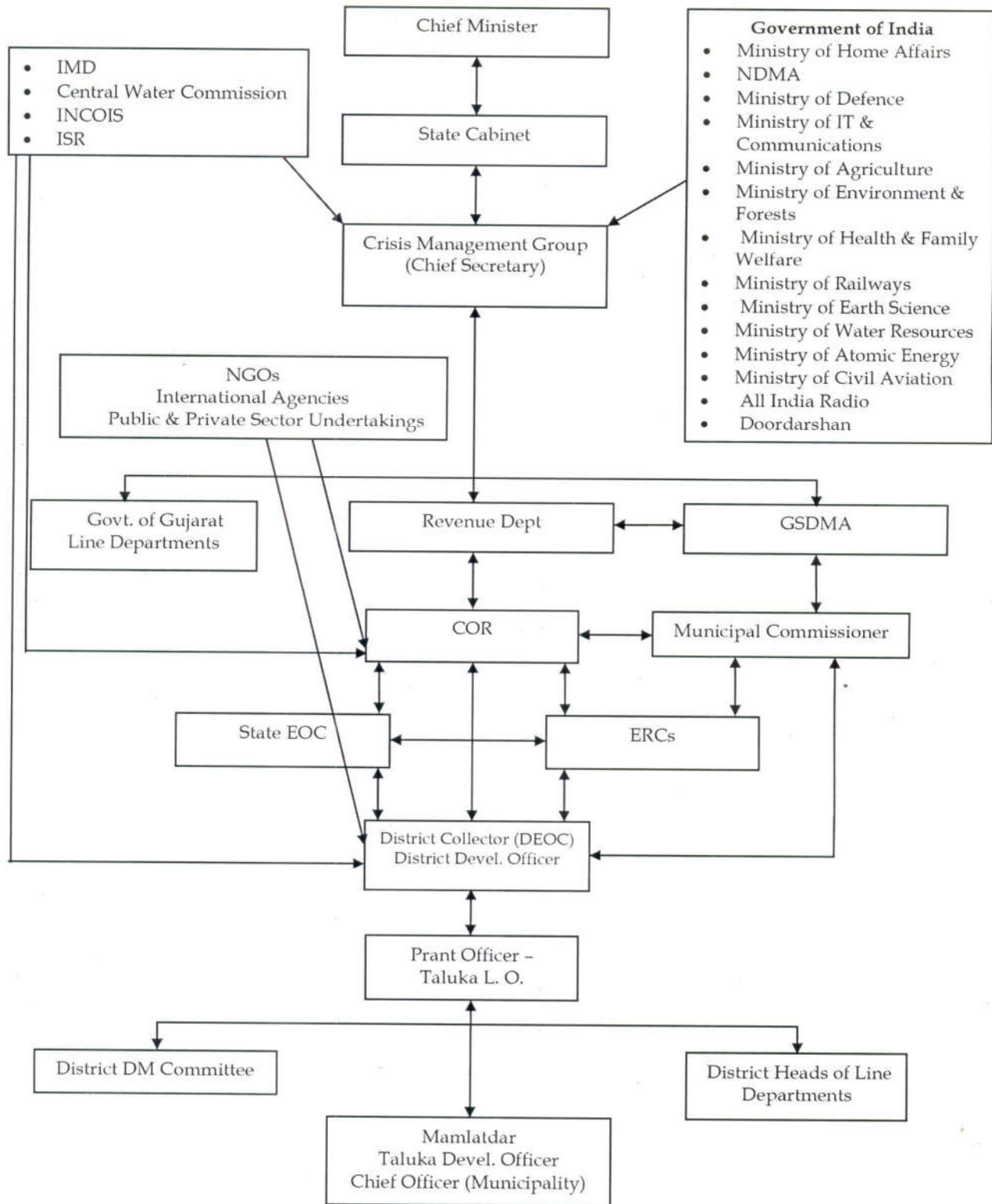
The plan incorporate multi level institutional as well as response planning mechanism at district level. That is.....

The DM structure in the State is as per the Gujarat State Disaster Management Act – 2003. The National Disaster Management Act – 2005 resembles the State Act with only a few provisions which are not a part of the State Act but are there in the Central Act. Those provisions include designating a Vice Chairman to the GSDMA, constitution of a State Executive Committee, establishment of a District Disaster Management Authority in each District and creation of a District Disaster Response & Mitigation Funds. The State has existing institutional arrangements in place for addressing the roles / responsibilities envisaged through the above provisions and hence does not find it compelling to implement the provisions afresh.

The Revenue Department of the State is the Nodal Department for controlling, monitoring and directing measures for organizing rescue, relief and rehabilitation. All other concerned line departments should extend full cooperation in all matters pertaining to the response management of the disaster whenever it occurs. 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 area to be disaster-affected area under GSDMA Act (Section 32 (2) (a)).

Under this State Disaster Management Plan, all disaster specific mechanisms would come under a single umbrella allowing for attending to all kinds of disasters. The existing arrangements therefore will be strengthened by defining this administrative arrangement. This arrangement proposes Chief Secretary as the head supported by the Relief Commissioner through the branch arrangements at the Emergency Operations Centres (EOC), both at State level and at the district levels. There is a formal Incident Response System in the State. The GSDMA Act 2003 empowers Commissioner of Relief to be the Incident Commander in the State and District Collector in the respective districts.

1.10 DM Structure in the State



3.4 District Disaster Management Committee

The District Collector will be responsible for coordinating all disaster management activities at the district level. There shall be a District Disaster Management Authority headed by Collector. The District Disaster Management Authority shall approve a district disaster management planning and review all measures relating to preparedness and response to various hazards. The District Disaster Management Committee comprises members from Jilla Panchayat, different line departments, NGOs and others to be notified by the Department of Disaster Management from time to time. In times of disasters, Dist. Collector shall constitute a District Relief Committee to oversee management of relief. Following member should be club at district level committee.

Sr. No.	Designation	Position in DCMG
1	Collector/ District Magistrate	Chairmen
2	District Development officer	Member
3	District Superintend Police	Member
4	District Additional Collector	Member
5	District Supply Officer	Member
6	Exe. Engineer-R&B State	Member
7	Exe. Engineer-R&B Panchayat	Member
8	Exe. Engineer-R&B State Irrigation	Member
9	Superintending Engineer- PGVCL	Member
10	District Home guard commandant	Member
11	Superintendent Civil Hospital	Member
12	Port Officer-KPT	Member
13	District forest Officer (west)	Member
14	District forest Officer (east)	Member
15	Dy. Director-Information Department	Member
16	District Municipality Officer	Member
17	Regional Officer-GPCB	Member
18	District Agriculture Officer	Member
19	All S D M	Member

20	Regional Transport officer	Member
21	Divisional Controller-State transport	Member
22	Dy. Controller –Civil Defense	Member
23	District Education Officer	Member
24	District Primary Education officer	Member
25	NGO Member	Member
26	Media Person	Member

DDMC: -District Disaster Management Committee:

The District Collector will be responsible for coordinating all disaster management activities at the district level. There shall be a District Disaster Management Authority headed by Collector. The District Disaster Management Authority shall approve a district disaster management planning and review all measures relating to preparedness and response to various hazards. The District Disaster Management Committee comprises members from Jilla Panchayat, different line departments, NGOs and others to be notified by the Department of Disaster Management from time to time. In times of disasters, Dist. Collector shall constitute a District Relief Committee to oversee management of relief. following member should be club at district level committee.

Sr. No.	Detail
1	Collector
2	DDO
3	SP
4	District supply officer
5	Exe. Engineer-R&B State
6	Exe. Engineer-R&B Panchayat
7	Exe. Engineer-R&B State Irrigation
8	Superintending Engineer- PGVCL
9	District Home guard commandant
10	Superintendent .Hospital
11	Port Officer-GMB
12	District forest Officer
13	Dy. Director-Information Department

14	<i>Chief fire officer</i>
15	<i>Regional Officer-GPCB</i>
16	<i>District Agriculture Officer</i>
17	<i>SDM</i>
18	<i>Regional Transport officer</i>
19	<i>Divisional Controller-State transport</i>
20	<i>Dy. Controller –Civil Defense</i>
21	<i>District Education Officer</i>
22	<i>District Primary Education officer</i>
23	<i>NGO Member</i>
24	<i>Media Person</i>

C. TDMC: - Taluka Disaster Management Committee:

TDMC		
Liason Officer (LO)		
TDO	Mamlatdar	Line Department (State)
Assistant TDO	Dy. Mamlatdar(Revenue)	Irrigation
Extension Officer	Dy. Mamlatdar(Civil Supply)	Road & Building (State & Panchayat)
Gram Sevak/Talati	Dy. Mamlatdar (Mid Day Meal)	Forest
Kelavani Nirikshak	Dy. Mamlatdar (e Dhara)	DGVCL
Veterinary Offier	Circle Officers	Taluka Health Officer
Agriculture Officer	Talati (Revenue)	Water Supply
Social Welfare Officer		Transportation
Child Development Project Officer		Police
		Central Govt.Department
		Western Railway
		NHAI
		Port Authority
		Post & telecommiunication

Block/Taluka level Disaster Management Committees will be constituted and will be headed by Mamlatdar as the case may be Officers from different departments and representatives of local panchayat body will be members of this Committee. The Committee will look into all the aspects of disaster management including mitigation preparedness, response and relief. Following member is club in TDMC.

<i>Sr. No.</i>	<i>Detail</i>
1	<i>Dy. Collector/ Dy.D.D.O.</i>
2	<i>Mamlatdar</i>
3	<i>Taluka Development Officer</i>
4	<i>Dy. Executive Engineer- R & B (State)</i>
5	<i>Dy. Executive Engineer- R & B (Panchayat)</i>
6	<i>Dy. Executive Engineer – Irrigation</i>
7	<i>Dy. Executive Engineer –GEB</i>
8	<i>Dy.Executive Engineer – Water Supply</i>
9	<i>Junior Engineer-Telecom</i>
10	<i>Medical Officer (Mother PHC)</i>
11	<i>Police Inspector/ Police Sub Inspector</i>
12	<i>Taluka Home Guard Commandant</i>
13	<i>Taluka Kelvani Nirikshak</i>
14	<i>Godown Manager- Civil Supply Corporation</i>
15	<i>Depot Manager – S.T.</i>
16	<i>Port Officer</i>
17	<i>Range Forest Officer (Head Quarter)</i>
<i>❖ <u>Non- Government Members</u></i>	
18	<i>Present-Taluka Panchayat</i>
19	<i>M.P.</i>
20	<i>M.L.A.</i>
21	<i>Chairman- Social Justice Committee (Taluka Panchayat)</i>
22	<i>Woman Member - Taluka Panchayat</i>
23	<i>NGO Representative</i>

D. CDMC: -City Disaster Management Committee:

In each City / Nagarpalika, there shall be a Disaster Management Committee which will oversee all activities in disaster management. The ULB will also constitute a City Disaster Management Team consisting of officials and non-officials and organize training for them to be able to discharge their duties properly.

<i>Sr. No.</i>	<i>Department</i>
1	<i>Dy.Collector/SDM/Dy.DDO</i>
2	<i>Chief Officer</i>
3	<i>Chief fire officer</i>
4	<i>Mamlatdar</i>
5	<i>Town planning Head</i>
6	<i>Dy.Exe.Engineer-R&B state</i>
7	<i>Dy.Exe.Engineer-state-Irrigation</i>
8	<i>Dy.Exe.Engineer- PGVCL</i>
9	<i>Dy.Exe.Engineer-GWSSB</i>
10	<i>Junior Engineer Telecom</i>
11	<i>Medival Officer-C.H.C.</i>
12	<i>Medical Officer Municipality Health Centre</i>
13	<i>Head Transport committee</i>
14	<i>PI/PSI</i>
15	<i>Taluka Homeguard Commandent</i>
16	<i>Education Officer Municipality Education committee</i>
17	<i>Project Coordinator-UCD</i>
18	<i>Port officer</i>
19	<i>Range forest officer-Extension</i>
<i>`Non Governmental Member</i>	
20	<i>President Municipality</i>

21	<i>Member of Parliament</i>
22	<i>Member of Legislative assembly</i>
23	<i>Chairman- Standing Committee committee</i>
24	<i>Chairman-Water Supply committee</i>
25	<i>Chairman City planning committee</i>
26	<i>Chairman Construction Committee</i>
27	<i>Women Member of Municipality</i>
28	<i>Scheduled caste Member of municipality</i>
29	<i>Local N.G.O.</i>
30	<i>Other-Decide By CDMC</i>

E. VDMC: - Village Disaster Management committee

Each village shall have a Disaster Management Committee consisting of officials and nonofficials. The Committee will be constituted to oversee by the gram sabha. The Committee will be responsible for awareness generation, warning dissemination, community preparedness plan, adoption of safe housing practices and organizing and cooperating relief in post disastersituations. The member is..

<i>Sr. No.</i>	<i>Detail</i>
1	<i>Sarpanch-Chair Person</i>
2	<i>Talati cum Mantri</i>
3	<i>Primary Principal</i>
4	<i>Health Worker</i>
5	<i>Anganwadi Worker</i>
6	<i>President Seva Co operative</i>
7	<i>President Milk cooperative</i>
8	<i>Community Representative</i>
9	<i>Community Representative</i>
10	<i>Community Representative</i>
11	<i>Fair price shop holder</i>

3.5 Incident Response System in the Gir Somnath District

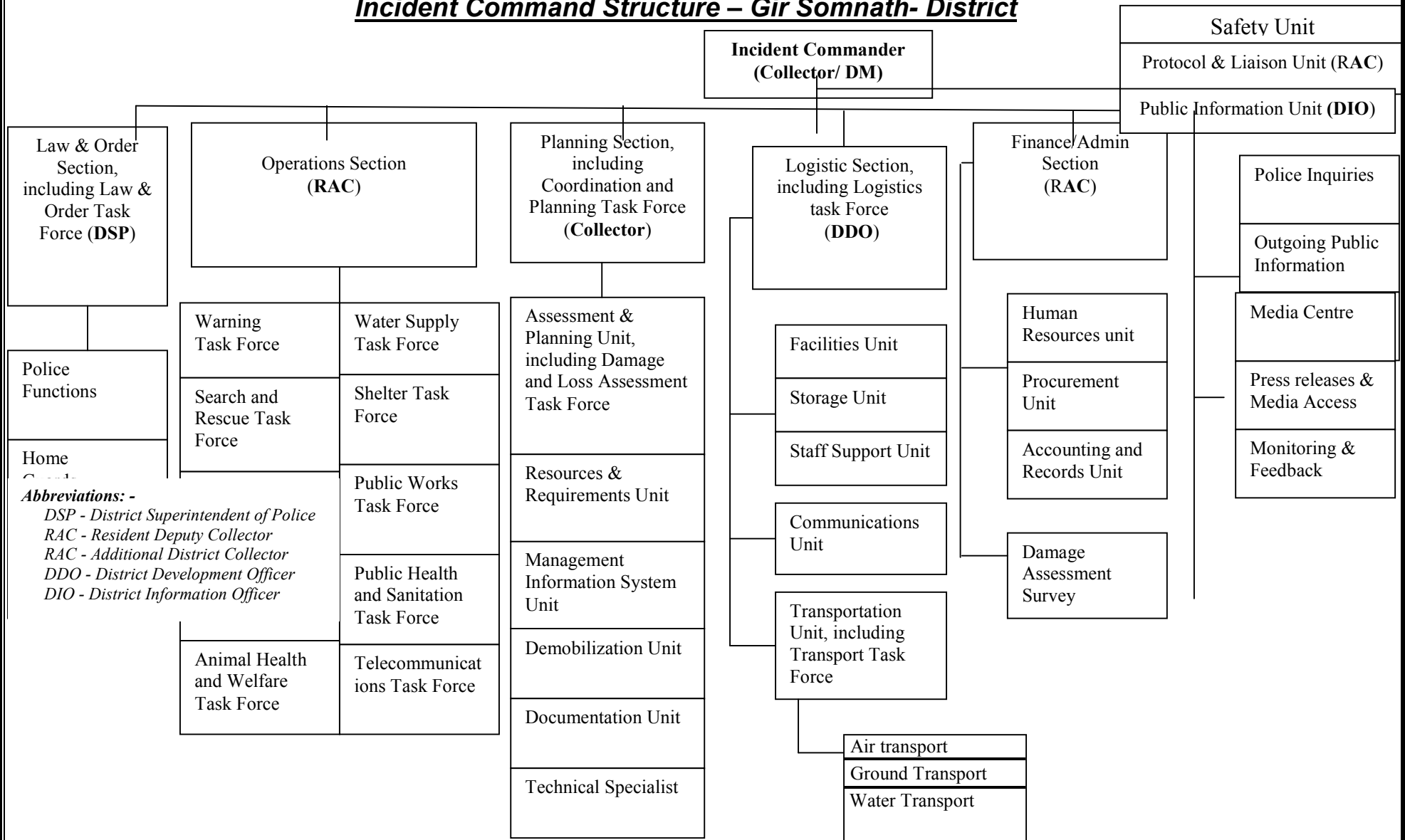
1. Disaster Response and District Incident Command System

The response to disasters in the district will be organized according to the Incident Command System as adapted to conditions in Gujarat State (ICS/GS). The argument for the ICS is that its fundamental elements –unity of command, clarity of objectives and efficient resource use are common to the effective response to any disaster.

In Gir Somnath district, the multi-hazard response plan focused on sector specific action plans unlike the department specific planning approach in the previous plan documents. The disaster response is led by the District Emergency Operation Center (EOC) under the command and control of the District Collector.

The organizational structure of the Incident command system of Gir Somnath district is given in the next page.

Incident Command Structure – Gir Somnath- District



2. ICS-Basic Functions

The basic functional descriptions for key elements in the district Incident command System is describe below. Not all these functions need to be filled (activated) in every disaster. However, the ensemble of these functions represents all the key tasks, which need to be accomplishes in a well-planned manner and execute in effective and cost efficient disaster response effort.

I. Incident Commander :

Responsible for overall management of an incident based on clearly stated mandate from higher authority and based on focused objectives responding to the immediate impact of the incident.

An Incident Commander, who can be assist by a Dy. Incident Commander, leads the Incident command. In each incident will have as many as many commanders and other staff as there are shifts in the incident operation. Shifts will normally not exceed 12 hours at a time and should be standardized to 8 hours each as soon as possible after the start of the incident.

II. Command Staff Units

A) Safety unit:

Responsible for ensuring the safe accomplishment of all activities undertaken in response to the incident . This task is accomplishes through developing incident specific safety guidance documents, reviewing and advising on the safety of plans and monitoring actual operations to ensure safety of personnel and survivors.

B) Protocol and Liaison unit:

Responsible for all official visits as well as liaison between the incident command and organizations providing personnel or material support being used to manage the incident. The first point of contact for NGOs and others coming to the disaster as well as responsible for managing coordination meetings (some of which may actually be held by taskforces or sections).

C) Public Information Unit:

Responsible for all media and public information tasks related to the incident. To accomplish its task, the unit can have the following sub units:

- **Public inquiries:** *To handle non media requests for information*
- **Outgoing public information:** *To handle public information dissemination*
- **Public opinion feedback:** *To collect information from the public (incident survivors and the non-affected)*
- **Media center:** *To provide a single point of contact for all media involved in the incident.*
- **Press release and media access:** *Produce all releases and provide a single point of contact to arrange media access to the incident.*

- **Monitoring and Feedback:** To monitor media reports and provide feedback to the incident management on coverage of the incident and to also take corrective measures and issue contradictions if required.

III. Law and Order Section

Responsible for assuring the execution of all laws and maintenance of order in the area affected by the incident . The law and order section incorporates law and order task force that may be create to deal with a disaster.

Police functions: As determined by the normal mandate for and special duties assigned to the police service

Home guard: As determined by the normal mandate for and special duties assigned to the home guard

Volunteers: Supporting police and home guards in non-enforcement tasks, such as patrolling, monitoring and evacuations

IV. Operation Section

Responsible for assuring specific operations according to objectives and plans to address the immediate impacts of the incident. Taskforces under the operation section will deal with specific functional tasks, such as search and rescue, the provision of water or shelter. The composition and size of these taskforces depends on the nature of the incident.

The District administration of Gir Somnath has identified 16 expected task forces for key response operation functions that are describe below. Additional taskforces can be added under the operations section as needed by the circumstances of a disaster. Each Taskforce is led by one organization and supporter by other organizations.

Emergency Operation Taskforce Functions

Sr. No.	Emergency Operation Taskforce	Functions
1	Coordination and Planning	Coordinate early warning, Response & Recovery Operations
2	Administration and Protocol	Support Disaster Operations by efficiently completing the paper work and other Administrative tasks needed to ensure effective and timely relief assistance
3	Warning	Collection and dissemination of warnings of potential disasters
4	Law and Order	Assure the execution of all laws and maintenance of order in the area affected by the incident.
5	Search and Rescue (including Evacuation)	Provide human and material resources needed to support 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 as appropriate.
8	Food and Relief Supplies	Assure the provision of basic food and other relief needs in the affected communities.
9	Power	Provide the resources to reestablish normal power supplies and systems in affected communities.
10	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.
11	Animal Health and Welfare	Provision of health and other care to animals affected by a disaster.
12	Shelter	Provide materials and supplies to ensure temporary shelter for disaster-affected populations
13	Logistics	Provide Air, water and Land transport for evacuation and for the storage and delivery of relief supplies in coordination with other task forces and competent authorities.
14	Survey (Damage Assessment)	Collect and analysis 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 Information)	Provide liaison with and assistance to print and electronic media on early warning and post-disaster reporting concerning the disaster.

The specific response roles and responsibilities of the taskforces indicated above is that these roles and responsibilities will be execute and coordinated through the ICS/GS system. For example, in flood, search & rescue would come under the Operations section, Transport would come under the Logistics Section and Public Information under the Public Information Unit.

V. Planning Section

Responsible for collecting and analyzing information and developing plans to address the objectives set to address the incident. The overall work of the planning section will include efforts undertaken by any planning and coordination taskforce which is established as part of the response to a disaster. Units under the section include:

1. Assessment and planning

2. *Resources and Requirements*
3. *Management information system*
4. *Documentation*
5. *Demobilization and*
6. *Technical specialists*

VI. Logistic section

Responsible for all task and functions related to provision of material and other resources needed for operations and the physical and material support and operation of the incident management team. This section include transportation taskforce established to support disaster operations. Logistics tasks are through the following units:

1. *Storage and supply*
2. *Facilities*
3. *Staff support*
4. *Communications*
5. *Transportation (include ground, air water)*

VII. Finance and Administration

Responsible for managing all financial and administrative tasks related to incident field operations. These tasks may, but would not usually include disbursement of financial aid to those affected by an incident . The task of this section are accomplished through following units: 1. Human resources

2. *Procurement*
3. *Accounting and records*

Cross-Task Force Action Matrix

(Gray areas indicate where cooperation between task forces was noted as needed during action plan development.)

Task Force	Warning	Law & Order	SAR & Evacuation	Public Works	Water	Food & Relief Supplies	Power	Health	Animal Health	Shelter	Logistics	Damage Assessment	Tele-communications	Media
Coordination & Planning														
Warning														
Law & Order														
S & R/Evacuation														
Public Works														
Water														
Food & Relief Supplies														
Power														
Health														
Animal Health														
Shelter														
Logistics														
Damage Assessment														
Telecommunications														

Task force, supporting organizations vis-a vis ICS/GS section matrix

The composition of the taskforces is given in the table below:

S. No.	Task Force	Taskforce Leader	Supporting members / Organizations	ICS/GS Section / Unit
1.	Planning and Coordination	Collector/ DM	DDO, DSP, RAC, SDM and Mamlatdar	Planning
2.	Administration & Protocol	RAC	DDO, DSP, RAC and Mamlatdar	Finance & Administration
3	Damage Assessment/Survey	RAC	DIC, Dy. DDO, Ex. Engr., R&B, DAO, Fisheries	Planning
4	Warning	RAC	RAC, Dy. Mamlatdar, Control Room, District Information Officer (DIO)	Operation
5	Communications	RAC	Dy. Mamlatdar, Mobile Operators, TV, Radio, Port Office GMB, Police, Forests	Logistics
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	DSP	Dy. SP, Home Guards Commandant, NGOs, Para-military and Armed Forces	Law & Order
9	Search & Rescue	Dy. Collector Civil Defense	Mamlatdar, TDO, Police, Executive Engr., Fire Brigade, RTO, State Transport, Health Deptt.	Operation
10	Public Works	Ex. Engr. R&B (State)	Irrigation, Ex. Engr., Panchayat, NGOs, Water Supply Board, Municipalities, Home Guards, Police	Operation
11	Shelter	Dist. Primary Education Officer	School Principal, Teachers, Health, PHC, State Transport, Water Supply, RTO, Mamlatdar, TDO.	Operation
12	Water Supply	Ex. Engr. GWSDB / Ex. Engr. Water Works	Dy. Ex. Engr., Talati, Mamlatdar, TDO, Health, Dy. Engr.	Operation
13	Food & Relief Supplies	Dist. Supply Officer	FPS, PDS, Mamlatdar, NGO, RTO, State Transport, Municipality, DRDA, Police, Home guard	Logistics

14	Power	Supt. Engr. GEB	Ex. Engr., Dy. Engr. Technical, GEB, Transport	Operation
15	Public Health & sanitation	Chief district health Officer (CDHO)	Supt. Hospital, PHCs, CHCS, Municipality, Fire Brigade, Civil Defense, R&B, NGOs, Doctors, TDO, Mamlatdar	Operation
16	Animal Health & Welfare	Dy. Director Animal Husbandry	Veterinary Inspector, NGOs	Operations

3.6 EOC setup and facilities available with the location

District Emergency Operation Centers/Control Rooms (DEOC)

- ***District Control Room (DCR) / District Emergency Operation Centers (DEOC)***

The District Control Room is located at Near Bhada office, opposite New Swaminarayan Temple. It is also the central point for information gathering, processing and decision making more specifically to combat the disaster. Most of the strategic decisions are taken in this control room with regard to the management of disaster based on the information gathered and processed. The Incident Commander takes charge at the District Control Room and commands the emergency operations as per the Incident Command System organizational chart.

All the task force leaders shall take position in the District Control Room along with Incident Commander to enable one point co-ordination for decision-making process.

- ***Facilities at District Emergency Operation Centers***

The District Control Room equipped with to the following items in Table:

<i>Sr. No.</i>	<i>Item/ Facility</i>	<i>Unit/ Number of item</i>
1	Telephones	3
2	Handheld Radios and Base Stations	1
3	Satellite Telephone	1
4	PC with GSWAN Internet and web site facilities	1
5	Marker board -	1
6	Conference table	1
7	A copy of Disaster Management Plan	2
8	Drawings showing Disaster information	10
9	Other relevant documents of district information	--
10	Chairs	16
11	Fax machine	1
12	Printer	1

- ***Taluka Emergency Operation Centers (TEOC)***

The Taluka Emergency Operation Centers located at the Office of Mamlatdar. The Liaison Officers of the respective Talukas shall take charge of the Control Room.

The respective Liaison Officers shall coordinate between the task group members working at disaster sites and TFOR for mobilization of resources and dissemination of instructions received from TFOR/DEOC.

- **Task Force Operation Room (TFOR)**

Individual Task Force function shall activate & operate their respective control rooms in their office manned by a competent person who is proficient in communication and technically capable of coordinating with Taluka Level Control Room and District Control Room and mobilize requisite resources to the disaster site.

- **Facilities at Task Force Operation Rooms (TFOR)**

The following facilities are maintained inside TFCR:

- Telephones
- Facsimile
- Satellite Phone (no immediately) - it is desirable.
- Hand held Radios/Base Stations
- Marker board (1)
- A copy each of Disaster Management Plan and Task Force Plan
- Other relevant documents, if any

- **Facilities at Taluka Level Control Rooms (TLCR)**

The following facilities are maintained inside TFCR:

- Telephones
- Facsimile
- Satellite Phone (desirable)
- Hand held Radios/Base Stations
- Marker board (1)
- A copy each of Disaster Management Plan and Taluka Level Plan
- Other relevant documents, if any

Responsibility of up keeping and maintenance of all the above items / facilities in the respective Control rooms is given as below.

DCR (DEOC): District Collector or any person nominated

TFCR : Respective Task Force Leader

TLCR (TEOC) : Respective Taluka Liaison Officer

The above responsible Depts./ personnel shall carryout periodic inspection of such facilities in their respective control rooms at the frequency set by them and maintain records on the same.

Emergency Communication Systems

Communication system is very crucial for effective control of any disaster. The communication philosophy adopted by Disaster Management team during the disaster is given as below:

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

Synthesized Radio Communication

All the Control Rooms are equipped with Radio base stations and all the task force leaders and their teams are provided with hand held radio sets. The different user groups are operating at different frequency channels allotted to them for ease in communication in respective groups. The table below shows the allotted frequency channel for individual Task Force. All the sets are programme for different groups' frequencies to facilitate horizontal communication among the different task groups.

Sr. No.	Task Force / Functional Area	Channel
1.	DCR	1
2.	Law & Order & its TFOR	2
3.	Search & Rescue & its TFOR	3
4.	Public Works & its TFOR	4
5.	Shelter & its TFOR	5
6.	Water Supply & its TFOR	6
7.	Food & Social Service & its TFOR	7
8.	Power & its TFOR	8
9.	Public Health & Sanitation & its TFOR	9
10.	Logistics & its TFOR	10
11.	Animal Health & Welfare & its TFOR	11
12.	Relief Supplies & its TFOR	12
13.	Communication & its TFOR	13
14.	Survey & its TFOR	14
15.	Taluka Level Control Room (TLCR)	15

At present, "Hand held radio sets" are with the District Magistrate, DDO, DSP, fire Brigade and Forest department. If possible, Health Personnel may be given these sets later.

Telephones

Telephones and Fax Machine had provided at DEOC and all TEOC Control Rooms.

3.7 Alternate EOC available and its location

The Gir Somnath District Control Room is located at Veraval Collector office, It is also the central point for information gathering, processing and decision making more specifically to combat the disaster but when such kind of situation.

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 seriousness of the situation:

Satellite Communication System

Satellite communication shall be activated once all the communication systems fail. This facility is installed at all the control rooms. The Telecommunication Task Force Leader shall ensure that this facility is resumed on all such occasions.

Messengers

- Use of messengers as a last resort to carry the hand written messages to persons concerned in dealing with the disaster.
- A dedicated vehicle shall be made available by the Transport Task Force Leader upon request

Right use of Communication facility

- 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 brief and simple.
- Telephones/ Hot Lines shall be used wherever possible to avoid congestion of Radio communication.
- All task force members shall communicate only through their allotted frequency channel to avoid congestion in the particular channel.

Personnel who use Radios should be acquainted with the operation of the equipment, various channels, code words, length of speech, etc.

3.8 Public and private emergency service facilities available in the district

Gir Somnath district has 5 Fire station in Respective 6 Municipality and in addition the district has one Emergency Response Center located Rajkot District. This emergency service are fully equipped by various equipment and train personal which are use in search and rescue operation during disaster situation.

3.9 Forecasting and warning agencies

Alert Mechanism – Early Warning

On the receipt of warning or alert from any such agency, which is competent to issue such a warning, or on the basis of reports from District Collector of the occurrence of a disaster, the response structure of the State Government will be put into operation. The Chief Secretary/Relief Commissioner will assume the role of the Chief of Operations during the emergency. The details of agencies competent enough for issuing warning or alert pertaining to various types of disasters are given below;

Sr. No.	Disaster	Agencies
1	Earthquakes	IMD, ISR
2	Floods	IMD, Irrigation Department
3	Cyclones	IMD
4	Tsunami	IMD, ISR, INCOIS
5	Drought	Agriculture Department

6	<i>Epidemics</i>	<i>Health & Family Welfare Department</i>
7	<i>Industrial & Chemical Accidents</i>	<i>Industry, Labor & Employment Department, DISH</i>
8	<i>Fire</i>	<i>Fire & Emergency Services</i>

Chapter 4

Prevention and Mitigation Measures:

Prevention measures in development plans and programmers

For disaster prevention and mitigation, both structural and non-structural interventions can be planned. Structural interventions include construction of physical engineering and non engineering structures to reduce hazard risks. Non structural mitigation includes awareness and capacity building at official and community level, formulation of new plans and overall promoting a commitment for safety.

Mitigation measures can be divided in two categories:

- i) Structural measures: On site works, construction, and engineering works and*
- ii) Non-structural measures: Which include studies, research, regulations, policy changes and capacity building activities that support the structural measures.*

The taluka disaster management plan includes hazard specific structural and non structural mitigation plans in consultation and convergence with various Departments. For example, the MGNREGA work can take up activities on construction of embankment for flood safety or the forest department may take up mangrove plantation in the coastal areas, while the water supply department can construct hand pumps on raised platforms.

Departments shall draw out its own plan, goals and milestones and review it annually for its achievements and planning for next year.

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. The district can avail itself of four mechanisms (singularly or together) to reduce risk and vulnerability;

- Long term planning for mitigation, preparedness and prevention investments in the district,*
- Enforcement of regulations, particularly building and safety codes and land use plans,*
- Review and evaluation of development plans and activities to identify ways to reduce risks and vulnerability, and,*
- Capacity building, including warning, the provision of relief and recovery assistance and community-level identification of risk and 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.

Base on the interim assessment of risk and vulnerabilities, the District will focus on the following areas for mitigation, preparedness and prevention;

- Resilience of lifeline systems (water, power and communications)*
- Reduction in disaster impact on health care facilities, schools and roads*

- Vulnerability reduction in flood-prone areas
- Vulnerability reduction to high winds
- Improvement of Off-site Preparedness near Industrial sites.

Hazard wise Structural and Non- structural Mitigation Measures

Hazard: Flood

Table No. : 4.1

Structural Mitigation Measures for Flood (Identified works of concerned Departments)

Probable Mitigation Measures	Implementing Departments	Convergence with Scheme/ Program	Time Frame
<i>Desalting and deepening of water channel (khans)</i>	<i>Irrigation and Rural Development, GLDC</i>	<i>Departmental program & MGNREGS,</i>	<i>Regularly</i>
<i>Construction of embankments/ protection wall</i>	<i>Rural Development, Forest</i>	<i>Departmental program & MGNREGS, watershed, Integrated coastal zone management programme</i>	<i>2016-17</i>
<i>Repair of embankments/ protection wall</i>	<i>Rural Development, R&B department</i>	<i>Departmental program & MGNREGS</i>	<i>Regularly</i>
<i>Repair and maintenance of Flood Channels, canals, natural drainage, storm water lines</i>	<i>Irrigation department Concern Municipality</i>	<i>Departmental or special plan</i>	<i>2016-17</i>
<i>Construction of Safe Shelters (new construction through Indira Awas, Sardar Awas and Ambedkar Awas)</i>	<i>Collector and R&B District Panchayat</i>	<i>NCRMP</i>	<i>Regularly</i>
<i>Protection wall and mangroves and vegetative cover against sea level intrusion and land erosion</i>	<i>Forest and Rural development department GEC</i>	<i>Department schemes, MGNREGS, IWMP Integrated coastal zone management</i>	<i>2016-17</i>

Probable Mitigation Measures	Implementing Departments	Convergence with Scheme/ Program	Time Frame
Desalting of water bodies like river and ponds	Irrigation DDO Rural Development	MGNREGA and Land Development	2014-15

Table No. : 4.1
Non-Structural Mitigation Measures for Flood
(Identified works of concerned Departments)

Non-Structural measures	Implementing Departments	Convergence with agency/program	Time Frame
Safety audit of existing and proposed housing stock in risk prone areas	DDO, Rural development	IAY, Sardar Awas and other rural housing schemes	Regularly
Promotion of Traditional, local and innovative practices like bamboo/plastic bottle rafts etc, clean city green city	DDMC, TDMC, CDMC, SHGs and youth groups, NGOs Volunteers	Training and capacity building plan for disaster management At all level	Regularly
Capacity building of volunteers and technicians	DDMC, TDMC, CDMC	Training and capacity building plan for disaster management	Regularly
Awareness generation on health and safety of livestock	veterinary officer, rural development	Departmental Scheme	Regularly

Hazard: Cyclone

Table N.: 4.3
Structural Mitigation Measures for Cyclone

Structural measures	Identified Locations and Villages	Implementing Departments	Convergence with Scheme/Program	Time Frame
Plantations (mangroves) and Shelter Belt in the	Cyclone prone villages Gir	Forest department, Port Authority, DIC, TDO, Rural	Departmental schemes, MGNREGA Integrated coastal	2016-17

<i>Coastal Area</i>	<i>Somnath district</i>	<i>development department, GEC</i>	<i>zone management</i>	
<i>Identification and repair/ retrofitting of houses and buildings unsafe for cyclone</i>		<i>R & B (District Panchayat)</i>	<i>Departmental Scheme</i>	<i>Regularly</i>

Table No.: 4.4
Non-Structural Mitigation Measures for Cyclone

Non-Structural measures	Location/ coverage area	Implementing Departments	Convergence with agency/ program	Time Frame
<i>Strengthening of Early warning mechanisms</i>	<i>Cyclone prone villages In Gir Somnath district</i>	<i>DDMC, TDMC</i>	<i>District administration Line department</i>	<i>Regularly</i>
<i>Training and awareness generation for use of safety jackets/rings/buoys/rope etc for fisher folks</i>		<i>DDMC, TDMC, VDMC, CDMC</i>	<i>TDMP, VDMC</i>	<i>2016-17</i>
<i>Enforcing strict compliance to coastal regulation zone and awareness regarding hazard</i>		<i>Department of Environment & Forest Depart. Fishing GEC</i>	<i>Integrated Coastal Zone Management CRZ Regulation</i>	<i>2016-17</i>
<i>Registration of fishing boats</i>		<i>Fisheries Department</i>	<i>CRZ Regulation</i>	<i>2016-17</i>
<i>Regulate and issue orders for poor quality hoardings/buildings or any other objects</i>		<i>R & B Department</i>		<i>2016-17</i>

Hazard: Earthquake

Table No. : 4.5
Structural Mitigation Measures for Earthquake

Structural measures	Identified Locations and Villages	Implementing Departments	Convergence with Scheme/ Program	Time Frame
<i>Retrofitting (if required) of public utility buildings</i>	<i>Earthquake prone</i>	<i>R & B (State and Panchayat),</i>	<i>TP Plan and all</i>	<i>Regularly</i>

like offices, schools/ banks/ markets etc	6Taluka under zone 3 In district	DDO, Rural department	development plan	
Retrofitting of unsafe rural houses		DDMC, DDO, R & B State and panchayat	Rural housing schemes and departmental programs	Regularly
Identifying and safely dismantling unsafe structures		R & B department	Development plan	Regularly
Issue permission for Earthquake registrant		Area Development Authority	TP plan	Regularly

Table No. : 4.6
Non Structural Mitigation Measures for Earthquake

Non-Structural measures	Location/ coverage area	Implementing Departments	Convergen e with agency/ Program	Time Frame
Capacity building of architects, engineers and masons on earthquake resistant features	EQ prone 6Taluka under zone 3	R & B (State and Panchayat) DDMC, TDMC, CDMC	DRM, DRR, special training programme	Reg ularly
Registration of trained and certified mason		R & B (State and Panchayat), DDMC	--	Regularly
Strict enforcement of guideline pertaining to seismic safety for government rural housing, urban development structure		DDO, DDMC, CDMC, TDMC, VDMC	Rural housing schemes	Regularly
Mock-drills for		DDMC,	DRM, Nssp,	Regularly

<i>Schools, Hospitals and , Public Buildings and trainings for mason, engineers and architects</i>		<i>Schools</i>	<i>DRR,DM regulation</i>	
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Hazard: Drought

**Table No. : 4.7
Structural Mitigation Measures for Drought**

Structural measures	Identified Locations and Villages	Implementing Departments	Convergence with Scheme/ Program	Time Frame
<i>Development of Pasture land in common property, seed farms and trust land</i>	<i>Drought prone Taluka in district</i>	<i>Forest, Rural Development, Panchayat</i>	<i>Departmental Scheme, MGNREGA</i>	<i>2016-17</i>
<i>Rain Water Harvesting storage tanks at household level and public buildings</i>		<i>GWSSB, (WASMO), Rural Development</i>	<i>MGNREGA, Swajaldhara</i>	<i>2016-17</i>
<i>Structures for water harvesting and recharging like wells, ponds, check dams, farm ponds, etc</i>		<i>DDO, Rural development, irrigation department</i>	<i>MGNREGA ,Watershed program, departmental schemes</i>	<i>2016-17</i>
<i>Development of fodder plots/banks</i>		<i>DDMC, Forest department , animal husbandry department</i>	<i>Development plan</i>	<i>2016-17</i>
<i>Repair and maintenance, de-silting of water sources, check dams, hand pumps etc.</i>		<i>Irrigation, Rural Development</i>	<i>MGNREGA, Watershed</i>	<i>2016-17</i>

**Table No. :4.8
Non-Structural Mitigation Measures for Drought**

Non-Structural measures	Locations / coverage area	Implementing Departments	Convergence with agency/ program	Time Frame
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Non-Structural measures	Locations / coverage area	Implementing Departments	Convergence with agency/ program	Time Frame
<i>Listing/developing shelf of work for drought proofing/scarcity works including Identification of potential sites of water bodies</i>	<i>Drought prone Taluka in district</i>	<i>Rural Development</i>	<i>MGNREGS</i>	<i>2016-17</i>
<i>Farmer education to practice drought resistant crops and efficient water use</i>		<i>Agriculture & horticulture department</i>	<i>Departmental schemes</i>	<i>2016-17</i>
<i>Set up control mechanism for regulated water use (ponds, small dams, check dams) on the early onset.</i>		<i>Panchayats</i>		<i>Regularly</i>

Hazard : Industrial (Chemical)

Table No. 4.9

**Industrial (Chemical) Structural Measures
(in coordination with LCG, DCG district and state level authorities)**

Structural measures	Activities	Implementing Departments	Convergence with agency/ program	Time Frame
<i>Monitoring impact of industries on NRM (land, water and air)</i>	<i>Data collection of impact on natural resources (ground water monitoring wells, air quality test, etc)</i>	<i>DDMC, DCG GPCB</i>	<i>Environment protection act</i>	<i>Regular intervention</i>
<i>Safety assessment</i>	<i>Carry out structural safety inspection/audit</i>	<i>DISH, DCG (Asst. Director. Industrial safety and health)</i>	<i>Industrial act</i>	<i>Regular intervention</i>
<i>Protection wall</i>	<i>Build protection wall for minimize risk of disaster</i>	<i>Industrial unit</i>	<i>Industrial act</i>	<i>Regular intervention</i>

Table No.: 4.10

Industrial (Chemical) Non-Structural Measures

(in coordination with LCG, DCG, district and state level authorities)

Non structural Measures	Activities	Implementing Departments	Convergence Agencies	Time Frame
Planning	<i>Prepare an onsite and offsite emergency plan</i>	<i>Occupier, DISH</i>	<i>Various Industrial act</i>	<i>-</i>
	<i>Conduct mock drills as per the regulations</i>	<i>DISH and LCG</i>	<i>Various Industrial act</i>	<i>Regular intervention</i>
	<i>Update the DM plan as per the requirement</i>	<i>Occupier, DISH</i>	<i>Various Industrial act</i>	<i>Industrial act</i>
	<i>Monitor similar activities in all the factories/ industries</i>	<i>DISH and LCG</i>	<i>Various Industrial act</i>	<i>Industrial act</i>
Capacity Building	<i>Develop IEC material for Publication & Distribution</i>	<i>TDMC</i>	<i>Various Industrial act</i>	<i>Industrial act</i>
	<i>Awareness generation to general public and medical professional residing near MAH factories for immediate steps</i>	<i>TDMC, LCG</i>	<i>Various Industrial act</i>	<i>Industrial act</i>
	<i>Organize training programmers, seminars and workshops (e.g. for drivers of HAZMAT transport, line departments officers, Mamlatdar etc)</i>	<i>TDMC, LCG</i>	<i>Various Industrial act</i>	<i>Industrial act</i>
	<i>List of experts/ resource person/ subject specialist (District emergency Off site plan)</i>	<i>TDMC, LCG</i>	<i>Various Industrial act</i>	<i>Industrial act</i>
	<i>Encourage disaster insurance</i>	<i>Labor & employment department</i>	<i>Various Industrial act</i>	<i>Industrial act</i>
Medical	<i>Listing of hazardous chemicals and gases.</i>	<i>Occupier, LCG, DISH, THO</i>	<i>Various Industrial act</i>	<i>Industrial act</i>
	<i>Keep check on availability and validity of relevant antidotes for chemical hazards prevalent in Taluka</i>	<i>Occupier, LCG, DISH, THO</i>	<i>Various Industrial act</i>	<i>Industrial act</i>
	<i>Workshops and trainings for medical professionals to handle potential chemical and industrial hazard</i>	<i>THO, Occupier, LCG, DISH</i>	<i>Various Industrial act</i>	<i>Regularly</i>

Non structural Measures	Activities	Implementing Departments	Convergence Agencies	Time Frame
Compliance	Environmental Protection Act, Factory Act, Mutual Aid SOPs	DISH , GPCB	Various Industrial act	Regular interval

At the 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. DCG has a strength of 34 members which includes District Collector, SDM and Dy. Collector, DDO, Dy. Director – Industrial Safety & Health, DSP, PI, Fire Superintendent of the City Corporations or important Municipalities, Chief District Health Officer, Civil Surgeon, SE, Chief Officer, Dy. Chief Controller of Explosives, Commandant – SRPF, Group-I, Dy. Director – Information to name a few. At Taluka level Local Crisis Management Group (LCG) is formed for coordination of activities and executing the operations.

Hazard: Tsunami

Table No. 4.11
Structural Mitigation Measures for Tsunami

Structural measures	Identified Locations and Villages	Implementing Departments	Convergence with Scheme/ Program	Time Frame
Constructing shelter belts in coastal areas	Tsunami prone villages	Rural Development	Departmental programs , MGNREGA	Long term planning
Contraction Sea water brake structure		R & B State and panchayat	Departmental programs , MGNREGA	Long term planning

Table No. : 4. 12
Non-Structural Mitigation Measures for Tsunami

Non-Structural measures	Locations/ coverage area	Implementing Departments	Convergence with agency/program	Time frame

Non-Structural measures	Locations/ coverage area	Implementing Departments	Convergence with agency/program	Time frame
<i>Provisions of Coastal Regulation Zone to be effectively implemented</i>	<i>Tsunami prone villages</i>	<i>Department of Environment & Forest GEC</i>	<i>ICZMP</i>	<i>Long term planning</i>
<i>Capacity building of task forces in coastal villages</i>		<i>TDMC, DDMC, CDMC, VDMC,</i>	<i>DRM,</i>	<i>Periodically</i>
<i>Awareness activity in prone/ vulnerable area</i>		<i>DDMC , TDMC, CDMC, VDMC</i>	<i>DRM</i>	<i>Regularly</i>

Special projects proposed and ongoing programmers for preventing the disasters

1. Disaster Risk Management Programme (DRM)

Disaster Risk Management Programme (DRM) has taken strong roots at various levels of administration in Gujarat. The Department of Revenue & Disaster Management is the nodal Department in Government of Gujarat that handles the subject with GSDMA. Disaster Management Committees are formed at various levels and are assigned the task of implementing the programme. Representation for these committees are drawn from elected representatives, officials of line departments, professional bodies, Civil Defense, NGO and CBO representatives and local opinion leaders. Major Activities are being carried out under DRM program are Plan Development at Various Levels, Emergency Resources Database maintain through SDRN / IDRN, Capacity Building through Trainings & Resource Mobilization, Disaster Awareness through Orientations, Campaigning, Media Management and IEC distribution. Coordinate District Administration for all Disaster Management Activities with expertise knowledge, logistics and fund allocation.

2. National School Safety Programme:

A national school safety programmer is pilot project of NDMA and Government of India. Under a, project Kutch and Jamnagar are selected from Gujarat state and 200 school selected from Kutch District. NSSP project focus of School safety and done various activity like Capacity building of Teacher, student, Awareness programme at school level on Disaster management, conducting hazards wise mock drill, preparation of school disaster management plan etc.

Gujarat Initiative School Safety Programme- I

Initiative (GSSI) – I & II. The pilot programs were designed for promoting a culture of disaster safety in schools and reduce risk through structural and non-structural measures in the schools. One hundred and fifty schools were selected from the cities of Ahmadabad (100), Jamnagar (15) and Vadodara (35) cities on basis of the school's disaster vulnerability, number of students and willingness to implement the suggested measures. The following activities were conducted in each of the project schools:

School management was first approached and a presentation was made about why and how the concerned school can work on school safety

A School Safety Committee was formed with the help of school administration

A three-day programme on orientation of the school disaster management committee on school disaster management planning

Orientation about basic disaster awareness to coordinators and members of the school task forces

Detail training of the task force members on task force skills such as activities to be done for search and rescue, first aid, etc

Imparting lessons on emergency response in each classroom

Conducting mock drill and holding a debriefing meeting to evaluate the mock drill

Gujarat School Safety Initiative – I is completed in all the 152 schools, covering training of 1,00,000 students (primary and secondary standards) and 1,500 teachers in the basics of disaster management. School based DM plans were prepared for all the 152 schools. Earthquake drills were conducted in 80 schools attended by around 40,000 students and 640 teachers. As part of the long-term sustainability of the program, an assessment of non-structural mitigation measures was completed and school safety clubs have been opened in all the project schools. A short play on disaster awareness was also organized in 68 schools.

Gujarat School Safety Initiative – II

This initiative was designed for creation of cadre of master trainers and a pool of trained teachers at district level in disaster risk reduction across all the 25 districts of the State. It was designed for creating a pool of 100 Master Trainers (4 from each district). These master trainers would provide training to 625 teachers (25 from each district). Twenty five model schools were selected & School DM Plans were prepared involving the trained teachers. It was planned that trainings will be conducted for 1,000 teachers and 7,500 students in model schools.

3. National Cyclone Risk Mitigation Project (NCRMP):

Gujarat being prone to cyclones, it is the topmost priority of the State Government to reduce the effect of cyclone and minimize the loss to property and lives in the coastal regions of the State through creation of suitable infrastructure. Gujarat

has therefore been included in the NCRMP initiated by the National Disaster Management Authority and funded by the World Bank. Under NCRMP project various activity will carry out like Construction of cyclone shelter for selected area. In Kutch district 7 village are select for this project.

Structural: Structural Mitigation Measures

- a. **Retrofitting of Buildings:** Gir Somnath district come in Zone III in Earthquake. In There are mainly four major types of constructions:

Category A: Adobe, fieldstone Masonry Buildings
Category B: Brick Construction Masonry Buildings
Category C: R. C. C. Construction
Category X: Traditional & Conventional Construction

The buildings of Category A are very weak and may be damage even due to a lower intensity earthquake. There is a need for detailed assessment of buildings, which are vulnerable and may cause losses to life. Assessment of these buildings will help to evolve a strategy for their retrofitting.

After assessment of vulnerability of buildings the priority for structural mitigation has to be defined. Generally, public buildings are given first priority because they are lesser in number and at the time of disaster, people can take shelter in these public buildings. Some examples of important buildings are hospitals, clinics, communication buildings, fire and police stations, water supply, cinema halls, meeting halls, schools and cultural buildings such as museums, monuments and temples. The second priority goes to other type of buildings like housing, hostels, offices, warehouses and factories.

- b. **Construction control:** The best protection against earthquake is a strong built environment. The quality of buildings, measured by their seismic resistance is of fundamental importance. Minimum design and construction standards for earthquake and flood resistant structures legislated nationally, are an important step in establishing future minimum levels of protection for important structures. India now has building codes and regulations for seismic and flood resistant design. These codes are in constant review by the experts. The below mentioned building codes are generally practiced in India:

- **IS: 1893, 1984** - Criteria for earthquake resistance design of structures
 - **IS: 13828, 1993** - Guidelines for improving low strength earthquake resistant masonry buildings
 - **IS: 13920, 1993** - Ductile detailing of reinforced concrete structures subjected to seismic forces- code of practice
 - **IS: 13827, 1993** - Guidelines for improving earthquake resistance of earthen buildings
 - **IS: 13935, 1993** - Guidelines for repairing & seismic strengthening of buildings
- In building by-laws and the Seismic Code must be enforce by the municipal, Area Development Authority and Panchayat bodies.

Non-structural:

Land use planning: Damage to a building depends primarily upon the soil conditions and topology of the area. Gir Somnath district comes under High risk zone in terms of earthquake (Zone 3)

Training and awareness programmers: Mitigation also includes training of people for making the houses safe from earthquakes and floods. Training modules have to be prepared for different target groups viz. engineers and masons about safe building practices and general 'do's and don'ts' for public.

Mitigation strategies

The mitigation strategy for Jamnagar district involves the following elements:

- Further growth of human settlements in the low-lying areas should be checked through land-use planning. Such areas are vulnerable not only from flood hazards but are also vulnerable to earthquake liquefaction, which may increase the damage manifold. The department of Town and Country Planning will take care of seismic hazards while preparing the development plans for the district;
- Appropriate building codes will be made applicable for new engineered & non-engineered constructions, and should be strictly enforced by local body. The Municipal Corporation of local area will ensure the construction as per Indian Standard Building Codes;
- Infrastructure department will do the retrofitting of public buildings under their maintenance charge. Generally, PWD, Rural Engineering Services and Housing Board maintain the public buildings. The expenditure for such retrofitting will be taken care under maintenance head.
- Community awareness will be rising regarding seismic resistant building construction techniques and seismic retrofitting of existing buildings. Housing Board will be the nodal agency to provide training through workshops and demonstrations. PWD and RES will support MPHB in these efforts;
- Community awareness will be raised regarding 'do's and don'ts' in the event of an earthquake with the involvement of Panchayati Raj institutions and CBOs. Revenue department will be the nodal agency for this activity.

Development Schemes:

MGNREGS:

The MGNREGA achieves twin objectives of rural development and employment. The MGNREGA stipulates that works must be targeted towards a set of specific rural development activities such as: water conservation and harvesting, afforestation, rural connectivity, flood control and protection such as construction and repair of embankments, etc. Digging of new tanks/ponds, percolation tanks and construction of small check dams are also given importance. The employers are given work such as

land leveling, tree plantation, etc. It has a very broad spectrum which can be used for the benefit of the population that are vulnerable and are likely to be affected.

- 1. Construction of Tube wells can be done.*
- 2. Building of Roads for places which are not connected to other parts of the district.*
- 3. Leveling of low lying areas during flood to a higher level to prevent those areas.*
- 4. Construction of check dams and embankments and drainage systems to prevent flooding of those areas.*

Indira Awas Yojana :

This scheme can be used for the rehabilitation of the affected villages by making constructions for the affected population.

Sarva Shiksha Abhiyan:

This scheme can be used for creating awareness about mitigation and preparedness about accidents that are in control of man, in collaboration with educational institutions to the people so that they can make use of it when required.

NRHM:

This scheme can be used to facilitate for voluntary first aid during disaster and training the local population to deal with minor injuries so that they do not have to wait for professional help to help any individual. Training of nurses can be carried out as a preparatory plan.

Mukhyamantri Awas Yojana:

The scheme can facilitate the rehabilitation programs among the affected villages or the ones that are likely to be affected and lie in the vulnerable zone. They can come up with collaboration with the construction norms.

Jal- Abhishekh Abhiyan:

The aim of the scheme is to provide safe drinking water so it can be used to provide for clean drinking water during response and relief period .It can work in collaboration with sanitation systems during relief period and help in avoiding any kind of future epidemics in the affected region.

Samagra Swachta Abhiyan:

This scheme can also be used for providing sanitation in the relief camps to the affected population. Since relief camps are the places where lot of diseases and epidemics may break out, proper defecation and sanitation should be ensured by this scheme.

Madhyanah Bhojan Karyakram:

The scheme can provide for food supply during emergency situations in the affected areas or even in the relief camps.

Risk Management Funding

Short term provisions are expected to cover the immediate loss, incurred due to disasters. Whereas long term provisions include the set up of fire stations, watershed management, planting trees along the river etc.

Insurance schemes are important source of funds for restoration of private business enterprises. The Collector will coordinate with Insurance Companies to speed up settlement of insurance claims. It will help in restoration of private business enterprises. He will also coordinate with commercial banks for ensuring smooth flow of financial assistance from commercial banks for restoration of private business enterprises.

Agriculture department shall provide seeds and the required finance as loans through local banks for the resumption of agriculture activities. The district administration shall elicit the support funding of agencies like Care, CRS etc. for the resumption of agriculture and livelihood activities.

Revenue/Book Circulars contains standing instructions of the Government for distribution of ex-gratia payments to poor families, who suffer from disasters to initiate their recovery process. This assistance will be provided very promptly to the poor families by the functionaries of the Revenue Department.

In order to achieve the objectives, rollout workshop was held for sensitization of education department officials, district level administrators (District Education Officers & District Primary Education Officers), teachers and students. Eighty six master trainers were trained in 4 regional workshops, 593 teachers were trained throughout the State in 3 day workshops. Twenty five model schools were selected where 25,543 students and 861 teachers have been trained. One model school developed for each district. Methodology for School Safety program has been developed and tested, including templates for developing a School Disaster Management Plan. Training and awareness material has been developed. Also, draft text books for class VII, VIII IX were prepared incorporating the basics of Disaster Management.

Over and above the softer issues highlighted above, GSDMA has provided all the existing Government schools in Gujarat with ISI marked portable Water-CO2 type of Fire Extinguisher (31746 Government schools covered of which 31336 are primary and 410 are secondary and higher secondary schools). For the necessary guidance/instruction for use of fire extinguishers, GSDMA has prepared an 18-minute short education film in Gujarati on fire safety for schools. This was show to all government primary schools through the satellite network.

CHAPTER – 5

Preparedness Measures:

Formation of Person training for

Search & rescue

It is the duty of the DDMA to provide specialized life saving assistance to district and local authorities. In the event of a major disaster or emergency its operational activities include locating, extricating and providing on site medical treatment to victims trapped in collapsed structures. In the event of any disaster the Home Guards along with the support of the Police dept. form teams to locate injured and dead and try to rescue the ones in need. There are other bodies too that help these departments in this work, like the PWD, Health dept, Fire dept and also the people that voluntarily form teams to help the ones in need. Proper training for search and rescue process needs to be undertaken so as to minimize the time taken in rescuing someone. Also proper methodology and resources are needed to carry out a search & rescue mission.

The tactics used in the search & rescue process vary accordingly with the type of disaster that we are dealing with. In case of flood, a boat and trained swimmers are a must while in case of an earthquake sniffer dogs and cutting tools with trained manpower is a binding requirement. The household register that is maintained by the warden should be maintained for every village as it proves to be of great help in case of a disaster like an earthquake. Because in case of the aforementioned disaster people get trapped in the debris of buildings and houses and it becomes difficult to estimate how many people are present in the debris. But if a household register is maintained then the task becomes quite easy and effective to find out almost correctly that how many people would be present in any building/house at any given time. Thus the resources can be justifiably distributed and more lives can be saved. This kind of process is highly recommended in this particular district which lies in moderate earthquake prone region.

For flood it is recommended that the boats that are used should be light weight and the motor should be of 'luma' type, so that it becomes easy for the rescue team to lift the boat and carry it to the spot.

Search & rescue Team

Designation of trained S&R Team member

The Search & Rescue team is formed as and when required and the members & equipments are taken according to the nature of the disaster (and also on their availability).

- *Police Officers (2 or more)*

- Home guards (2 or more)
- Swimmers (In case of flood)
- A construction engineer (From P.W.D.)
- Driver (For Every vehicle)
- Any person with the prior experience of the disaster (From Home Guard/Police Dept.)
- A doctor or nurse or at least a person having first aid training
- A Class IV Officer (Health Dept.)

**Search & Rescue training programme organized in Gir Somnath
in 2015-16**

Table No: 5.1

Date	Taluka	Place	Approximate participants
16/02/16	Veraval	1)Maniben Kotak high school	650
17/02/16		2)Nagarpalika Veraval	100
18/02/16		Savaniya School	400
19/02/16		Sanskrit Collage	120
20/02/16		Somnath Temple Patan Village	800
22/02/16	Kodinar	Somnath Academy	400
23/02/16	Kodinar	Daxinamurti	700

24/02/16	Una	Nava Bandar School Collage	1500
25/02/16	Una	Shah H.D.High School	1200

Early Warning:

The early warning systems for different disasters should be in place so that the concerned administrative machinery and the communities can initiate appropriate actions to minimize loss of life and property. These should give an indication of the level of magnitude of the mobilization required by the responders. The goal of any warning system is to maximize the number of people who take appropriate and timely action for the safety of life and property. All warning systems start with the detection of the event and with their timely evacuation. Warning systems should encompass three equally important elements viz detection and warning, dissemination of warning down to the community level and the subsequent quick response.

The State acknowledges the crucial importance of quick dissemination of early warning of impending disasters and every possible measure will be taken to utilize the lead-time provided for preparedness measures. As soon as the warning of an impending calamity is received, the EOCs at the State, District and Block levels will be on a state of alert. The Incident Commander will take charge of the EOC and oversee the dissemination of warning to the community. The District Collector will inform the District Disaster Management Committees who will alert the lock and Village level DMCs and DMTs to disseminate the warning to the community. On the basis of assessment of the severity of the disaster, the State Relief Commissioner (Incident Commander) shall issue appropriate instructions on actions to be taken including evacuation to the District Collector, who will then supervise evacuation. In situations of emergency, the District Collector will use his own discretion on the preparedness measures for facing the impending disaster.

At the village level, members of the VDMCs and DMTs or village level will coordinate the evacuation procedures to the pre-designated relief centers, taking

special care of the vulnerable groups of women, children, old people etc. according to the plans laid down earlier.

Evacuation:

Evacuation is a risk management strategy, which may be used as a means of mitigating the effects of an emergency or disaster on a community. It involves the movement of people to a safer location. However, to be effective, it must be correctly planned and executed. The process of evacuation is usually considered to include the return of the affected community.

Shelter provides for the temporary respite to evacuees. It may be limited in facilities, but must provide protection from the elements as well as accommodate the basic personal needs, which arise at an individual level in an emergency.

The plan must allocate responsibility for management of each of the elements of shelter. Considering the wide range of services, agencies and issues to be managed, it becomes essential for 'shelter' to be managed within a structure, which facilitates the coordination of agencies and services and support of emergency workers. The following factors may need consideration:

- Identification of appropriate shelter areas based on safety, availability of facilities, capacity and number of victims*
- Approaches to the shelter location in light of disruption due to hazard impact and traffic blockades*
- Temporary accommodation*
- Provision of essential facilities like drinking water, food, clothing, communication, medical, electrical and feeding arrangements, etc*
- Security*
- Financial and immediate assistance*
- First-aid and counseling*

Types of evacuation

For planning, all evacuations may be considered to be one of two generic types:

- (a) Immediate evacuation, which allows little or no warning and limited preparation time as in the case of earthquakes and air accident*
- (b) Pre-warned evacuation resulting from an event that provides adequate warning and does not unduly limit preparation time as in the case of flood and cyclones.*

Principles of Evacuation Planning

- *Establishment of a management structure for organization, implementation, coordination and monitoring of the plan*
- *Determination of legal or other authority to evacuate*
- *Clear definition of rules and responsibilities*
- *Development of appropriate and flexible plans*
- *Effective warning and information system*
- *Promoting awareness and encouraging self-evacuation.*
- *Assurance of movement capability*
- *Building confidence measures and seeking cooperation of the affected community.*
- *Availability of space for establishment of relief camps having requisite capacity and facilities*
- *Priority in evacuation to be accorded to special need groups like women, old and sick, handicapped and children*
- *For effective evacuation, organization and running of relief centers, cooperation and involvement of all agencies viz. Community, volunteers, NGOs, NCC / NSS, Home guards and civil defense, district and village bodies be ensured*
- *Security arrangement and protection of lives and property*
- *Preparation and updating of resource inventories*
- *Appropriate welfare measures throughout all stages*
- *Test exercise of prepared plans and recording of lessons learnt*
- *Documentation*

Stages of Evacuation

There are five stages of evacuation as under:

- *Decision of authorities to evacuate victims*
- *Issue of warning and awareness*
- *Ensuring smooth movement of victims to designated relief camps*
- *Ensuring provision of all requisite facilities like security, safe-housing, feeding, drinking-water, sanitation, medical and allied facilities*
- *Safe return of personnel on return of normalcy*

Decision to Evacuate

Vulnerability analysis may indicate that for certain hazards and under certain conditions, sheltering in place could well be the best protection. Available lead-time may influence the decision to evacuate the public before the impact of emergency (e.g. floods) and reducing the risk to lives and property. Decision would also be dependent on factors like ready availability of suitable accommodation, climatic condition, and severity of likely hazard and time of the day.

The Collector would be the authoritative body to issue directions for evacuation. The OIC of DECR would convey directions to Desk Officers of concerned agencies, which are responsible to execute evacuation.

Basic consideration for Evacuation

The DCG will define area to be evacuated as also the probable duration of evacuation based on meteorological observations and intimations by the concerned

forecasting agencies. It should also identify number of people for evacuation, destination of evacuees, lead-time available, welfare requirements of evacuees as also identify resources to meet the needs of victims, viz. manpower, transport, supplies equipments, communications and security of the evacuated area.

The evacuating agency should set priorities for evacuation in terms of areas likely to be affected and methodology to execute evacuation:

- Delivery of warning
- Transport arrangement
- Control and timing of movement
- Fulfill welfare needs including medical treatment
- Registration of evacuees

All agencies involved in evacuation operation like Home guards, Police, PWD, PHED, etc. will coordinate in field. They will remain in touch with the Desk officials in the DECR for issuing warning, information and advise the public.

Evacuation Warning

An evacuation warning must be structured to provide timely and effective information. Factors, which may influence the quality and effectiveness of warning, include time, distance, visual evidence, threat characteristic and sense of urgency e.g. the more immediate the threat, the greater the resilience of people to accept and appropriately react to the warning.

The warning should be clear and target specific. The warning statement issued to the community should be conveyed in a simple language. The statement should mentioned:

- The issuing authority, date and time of issue
- An accurate description of likely hazard and what is expected
- Possible impact on population, area to be in undated or affected due to earthquake
- Need to activate evacuation plan
- Do's and Don'ts to ensure appropriate response
- Advise to the people about further warnings to be issued, if any

Damage & Loss Assessment

Immediately after the disaster, there is an urgent need of damage assessment in terms of loss of life, injury and loss of property. The objectives of damage assessment are to mobilize resources for better rescue and relief, to have detailed information of damage extent and severity of disaster and to develop strategies for reconstruction and restoration facilities.

Damage is assessing with regard to building stock, standing crops, agricultural area, livestock lost, forest cover decimated, vital installations etc. In damage assessment of building stock, generally three types of flags are used; green, yellow and

red. The green color is given to the buildings that are safe and require 2-3 days to return to their original function. Yellow flags depict the considerable damage to the buildings and considered unsafe for living, as they require proper structural repairs and careful investigation. The red flag is assigned to buildings that are partially or completely collapsed. Immediately after a disaster event, damage assessment will be conducted in 2 phases viz. Rapid Damage Assessment and Detailed Damage Assessment.

Training need analysis -Education and Capacity Building and arrangement for training:-

Although education about disaster mitigation and prevention and capacity building would seem to be ideal district-level efforts, the lead for both probably best rests with the state level, with districts having a facilitating role. The issue is that if 26 districts independently embark on education and capacity building it will be hard to coordinate and standardize the results across districts. A significant consequence would an inequality in capacities across districts, and thus uneven mitigation and prevention results' How to fund these activities remains open. Options range from GSDMA grants to set-asides in budget allocations. Project Impact in the US and similar programs in Australia and Canada are good models for the former approach.

Training, capacity building and other proactive measures Training:

Table No. 5.3

Sr. No.	Task / Activity	Responsibility
1	Training to civil defense personal in various aspect of disaster management	Home Department
2	Training to home Guards personal in various aspect of disaster management including search and rescue	Dy. Controller Civil Defense District Home Guards Commandant
3	Training to NCC and NSS personal in various aspect of disaster management	Education Department NCC Collector Office
4	Training to educational and training institutions personal in various aspect of disaster management	DDMC
5	Training to civil society, CBOs and corporate entities in various aspect of disaster management	DDMC
6	Training to fire and emergency service personal in various aspect of disaster management	Fire Dept, CDMC DDMC
7	Training to police and traffic personal in various aspect of disaster management	DDMC Police Dept.
8	Training to media in various aspect of disaster management	DDMC Information Dept.

9	Training to govt. officials in various aspect of disaster management	DDMC
10	Training to engineers, architects, structural engineers, builders and masons in various aspect of disaster management	DDMC, R & B

Awareness

Task	Activity	Responsibility
Information, education And communication	Advertisement, hording, booklets, leaflets, banners, shake-table, demonstration, folk dancing and music, jokes, street play, exhibition, TV Spot, radio spot, audio-visual and documentary, school campaign, Rally, - Planning and Design - Execution and Dissemination	<input type="checkbox"/> Information Dept <input type="checkbox"/> Education Dept <input type="checkbox"/> All line dept <input type="checkbox"/> Dist. Collectors <input type="checkbox"/> Chief officer <input type="checkbox"/> Other Dist. Authorities

Activation of Incident Response System in the District and identification of quick response team

Command:

This function establishes the framework within which a single leader or committee can manage the overall disaster response effort. A single Incident Commander is responsible for the successful management of the response during operational period in an area. If the incident grows in size and extends throughout many jurisdictions, multiple incident commanders can be useful with an area command authority may be established to coordinate among the incidents. Incident Commander requires the following Command Staffs to support him, which are as followings,

- Public Information Officer – the single media point of contact
 - Safety Officer – Responsible for identifying safety issues and fixing them, he has the authority to halt an operation if needed.
 - Liaison Officer – Point of contact for agency to agency issues.
1. **Operations:** this section carries out the response activities described in the Incident Action Plan (IAP) along with coordinating and managing the activities taken the responding agencies and officials that are directed at reducing the immediate hazard, protecting lives and properties. This section manages the tactical fieldwork and assigns most of the resources used to respond to the incident. Within operations, separate sections are established to perform different functions, such as emergency services, law enforcement, public works...etc.

2. **Planning:** this section supports the disaster management effort by collecting, evaluating, disseminating, and uses information about the development of the emergency and status of all available resources. This section creates the action plan, often called “Incident Action Plan” (IAP), which shall guide emergency operations/response by objectives.

Followings are the six primary activities performed by the planning section, including,

- Collecting, evaluating, and displaying incident intelligence and information
 - Preparing and documenting IAPs
 - Conducting long-range and contingency planning
 - Developing plans for demobilization
 - Maintaining incident documentation
 - Tracking resources documentation
3. **Logistics:** the process of response includes personnel, equipments, vehicles, facilities...etc, all of which will depend upon the acquisition, transport, and distribution of resources, the provision of food and water, and proper medical attention. The Logistic section is responsible for the mentioned process.
4. **Finance and Administration:** this section is responsible for tracking all costs associated with the response and beginning the process for reimbursement. The finance and administration section becomes very important when the national government provides emergency funds in place that guarantee local and regional response agencies that their activities, supply use, and expenditures will be covered.

A traditional command structure exists in the administrative hierarchy which manages disasters in India. It has been planned to strengthen and professionalise the same by drawing upon the principles of the ICS with suitable modifications. The ICS is essentially a management system to organise various emergency functions in a standardised manner while responding to any disaster. It will provide for specialist incident management teams with an incident commander and officers trained in different aspects of incident management, such as logistics, operations, planning, safety, media management, etc. It also aims to put in place such teams in each district by imparting training in different facets of incident management to district level functionaries. The emphasis will be on the use of technologies and contemporary systems of planning and execution with connectivity to the joint operations room at all levels.

The local authorities do not have the capacity to play an efficient role at local level to support the DEOC's requirements for field information and coordination. The DEOC will therefore need to send its own field teams and through them establish an Incident Command System. The system will comprise:

- Field command

- Field information collection
- Inter agency coordination at field level

Management of field operations, planning, logistics, finance and administration

Checking and certification of logistics, equipments and stores

Gir Somnath district has various types of logistics and equipment. It should be checked and certified by concern officer periodically. Disaster Management cell is regularly monitoring this activity and got certification of this equipment. (Detail information of Equipment is given in Annexure)

Operational check-up of Warning System

Warning system are checked periodically like, Satellite phone, Hot Line, Telephone connection, GSWAN connectivity etc, In Pre- monsoon meeting also give direction for checking warning system like, port signals.

Operational check-up for Emergency Operation Centre

Operational checkup of Emergency Operation Centre are carry out month wise and check out all facility and equipment in DEOC.

NGOs and other stakeholders coordination – identify their strengths and allocation of responsibilities in area/sector/duty/activities – Activate NGO coordination cell

NGO and Voluntary group are doing very important activity and response during disaster. DDMA also organized capacity-building programmers, awareness programmers on Disaster Management for NGO and Voluntary group. For arrangement of water supply, temporary sanitation facilities, search and Rescue activity, Relief distribution can be sought with help of special agencies, NGOs and CBOs. (Information of NGO and Voluntary group refer Annexure)

Awareness Generation: -

As a part of Preparedness Awareness, generation among community will be continuous process. From District to Taluka, Village level awareness programme must be conducted with the help of Print Media, Electronic media, folk media authority can create awareness among community.

Seasonal preparedness for Seasonal Disaster like Flood and Cyclone:

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Whether personal or institutional, all collections are subject to risks that can seriously affect the lifetime and value of a collection. For many museums, galleries, and

private collectors, an essential aspect in Collection Management is maintaining a loss prevention plan for seasonal disasters.

Hazards from these storms come in many forms including high winds, tornadoes, storm surges and flooding. Natural disasters make all of us acutely aware of our vulnerabilities to disaster. Fortunately, catastrophes of a large magnitude are rare, but disaster can strike in many ways. Large or small, natural or man-made, emergencies put collections in danger. Hazards can often be mitigated or avoided altogether by a comprehensive, emergency-preparedness plan. Such plans provide a means for recognizing and responding effectively to emergencies. The goal is to hopefully prevent damage or, at least, to limit the extent of the damage.

Identifying Risks

A prudent first step is to list geographic and climatic hazards and other risks that could jeopardize the building and collections. These might include geographical susceptibility to hurricanes, tornadoes, flash flooding, earthquakes, or forest fires, and even the possibility of unusual hazards such as volcanic eruptions. Consider man-made disasters such as power outages, sprinkler discharges, fuel or water supply failures, chemical spills, arson, bomb threats, or other such problems. Take note of the environmental risks that surround you. Chemical industries, shipping routes for hazardous materials, and adjacent construction projects all expose you to damage. Any event that is a real possibility should be covered under your Emergency Preparedness Plan. It is also important to determine the vulnerability of the objects within the collections. What types of materials are included? Are they easily damaged? Are they particularly susceptible to certain types of damage such as moisture, fire, breakage, and the like? How and where are collections stored? Are they protected by boxes or other enclosures? Is shelving anchored to structural elements of the building? Is it stable? Are any artifacts stored directly on the floor where they could be damaged by leaks or flooding? All items should be raised at least four inches from the floor on waterproof shelves or pallets. Are materials stored under or near water sources? Analyze your security and housekeeping procedures. Do they expose collections to the dangers of theft, vandalism, or insect infestation? Consider vulnerabilities. Are your collections insured? Is there a complete and accurate inventory? Is a duplicate of the inventory located at another site? Although there may be a wide range of disaster scenarios, the most common are water, fire, physical or chemical damage, or some combination of these. The specific procedures of a disaster plan focus on the prevention and mitigation of these types of damage.

Decreasing Risks

Once your hazards are specified, the disaster planner should devise a program with concrete goals, identifiable resources, and a schedule of activities for eliminating as many risks as possible. While water damage is the most common form of disaster for collections, everyone needs a good fire-protection system. Wherever possible, collections should also be protected by a fire suppression system. Preservation professionals now recommend wet-pipe sprinklers for most collections. In addition, water misting suppression systems have become available within the last several years;

these can provide fire suppression using much less water than conventional sprinkler systems. Before choosing a fire-protection system, be sure to contact preservation professional or a fire-protection consultant for information about the latest developments in fire protection and for advice appropriate to your collections and situation. An inventory will provide a basic list of holdings, and will be essential for insurance purposes. Improved collection storage, such as boxing and raising materials above the floor level, will reduce or eliminate damage when emergencies occur. Comprehensive security and housekeeping procedures will ward off emergencies such as theft, vandalism, and insect infestation. They will also ensure that fire exits are keep clear and fire hazards eliminated.

Identifying Resources

An important step in writing your plan is to identify sources of assistance in a disaster. Research these services thoroughly--it is an essential part of the planning process. These can range from police, fire, and ambulance services to maintenance workers, insurance adjustors, and utility companies. If possible, invite local service providers to visit in order to become familiar with your site plan and collections in advance of an emergency. For example, you may want to provide the fire department with a list of high-priority areas to be protected from water if fire-fighting efforts permit. Other valuable sources of assistance are local, state, or federal government agencies.

SDRN/IDRN data updation: -

State disaster Resource network and India Disaster Resource Network is a crucial databases for response any disaster. SDRN, a decision support tool, is layered using the existing IT Wide Area Network (WAN) of the State - GSWAN. SDRN uses the map-based Geospatial Information Systems developed by the Gujarat based organization Bhaskaracharya Institute for Space Applications and Geo-Informatics (BISAG). Currently, the SDRN network is being integrated with the GIS based Decision Support System using Java, MS-Access, Visual Studio 2005 with Database SQL Server 2005. The GIS Visualize does not require any GIS software. The GIS visualize contains multi layered options depicting roads-highways, taluka, district boundaries, rivers, ports, airways, etc. SDRN and IDRN updation are regularly base work and it is updation.

India Disaster Resource Network (IDRN) : -

IDRN, a web based information system, is a platform for managing the inventory of equipments, skilled human resources and critical supplies for emergency response. The primary focus is to enable the decision makers to find answers on availability of equipments and human resources required to combat any emergency. This database will also enable them to assess the level of preparedness for specific vulnerabilities. Total 226 technical items listed in the resource inventory. It is a nationwide district level resource database. Each user of all districts of the state has been given unique username and password through which they can perform data entry, data updation on

IDRN for resources available in their district. The IDRN network has functionality of generating multiple query options based on the specific equipment, skilled human resources and critical supplies with their location and contact details.

Community Warning System, Education, Preparedness

DRM Programme: -

GSDMA DRM activities:

Disaster Risk Management Programme (DRM) has taken strong roots at various levels of administration in Gujarat. The Department of Revenue & Disaster Management is the nodal Department in Government of Gujarat that handles the subject with GSDMA. Disaster Management Committees are formed at various levels and are assigned the task of implementing the programme. Representation for these committees are drawn from elected representatives, officials of line departments, professional bodies, Civil Defense, NGO and CBO representatives and local opinion leaders. Major Activities are being carried out under DRM program are Plan Development at Various Levels, Emergency Resources Database maintain through SDRN / IDRN, Capacity Building through Trainings & Resource Mobilization, Disaster Awareness through Orientations, Campaigning, Media Management and IEC distribution. Coordinate District Administration for all Disaster Management Activities with expertise knowledge, logistics and fund allocation.

The Disaster Risk Management Program (DRM) being implemented by Gujarat State Disaster Management Authority (GSDMA) aims to strengthen the response, preparedness and mitigation measures of the community, local self-governments, the District administration and the State in Gujarat. Under the DRM Programme

For the Prepared level specific plan following process will followed.

District Level Process

1. Orientation of District level officers and PRI members including line department officials
2. Formation of District Disaster Management Committee
3. Development of manuals and guidelines Capacity building of DDMC members, government officials, training institutes, other concerned organizations at district level
4. Development of the District Disaster Management Plan
5. Use of IEC materials for awareness generation for preparedness, risk reduction and mitigation
6. Data updation on IDRN

Taluka level process

1. Orientation cum sensitize Taluka level officers and PRI members.
2. Formation of Taluka Disaster Management Committee

3. Capacity building of government officials
4. Development of the TDMP
5. Use of IEC material and media sources for create awareness at taluka level
6. TDMP update on SDRN

City-ULB level process

1. Orientation of City level officers, elected members & leaders.
2. Formation of CDMP
3. Capacity building of municipal official and concerned organizations at city level
4. Development of the CDMP.
5. Use of IEC material for create awareness at city level
6. CDMP updation on SDRN

Village Level Process

1. Formation Cluster within 10 to 12 village and conduct cluster meetings over 10-12 villages
2. Organize Gramsabha in each village
3. Undertake PRA exercise at village level for hazard, vulnerability assessment and resource analysis
4. Facilitate the formation of the Village Disaster Management Committee (VDMC)
5. Conduct training programs for DMT and DMC Members and volunteers
6. Awareness campaigns on risk reduction mechanisms, Risk Transfer- insurance, disaster resistant construction
7. Developed Village Disaster Management Plan (VDMP)
8. Conduct mock drills for test the VDMP
9. Update VDMP twice in a year (by VDMC)

Gir Somnath district had taken the preparedness measures from village level to District level. At the villages village Task forces was formed and trained about First aid and Health, Search and Rescue and Disaster Management. Some volunteers were also trained in Disaster Management and plans like VDMP were prepared and updated. Officers reviewed the disaster preparedness of the villages and interacted with the Village level Disaster Management team members, in the pre-monsoon meeting all departments, and stakeholders were asked to get prepared departmental plan. SOP's were also discussed with them so that quick response can be assured and any kind of risk due to water lodging, flood, heavy rainfall and dam overflow can be reduced.

Prevention and Mitigation and preparedness 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.

Base on the interim assessment of risk and vulnerabilities, certain majors for mitigation, preparedness and prevention has been taken with respect to Gir Somnath District. These are...

The proposed state-level disaster-planning format sets out priorities for mitigation, prevention and preparedness activities. The underlying concept is to incorporate these three types of activities into normal (developmental) policies, procedures and undertakings and targeting specific areas for concerted effort.

Complementary priorities, plans and activities need to be established at the district level. This process is complicated by five realities:

1. Developmental policies and budgets are set at the state-level and project implementation is not always under the control of district authorities
2. District authorities have limited policy and funding independence.
3. The range of possible mitigation, prevention and preparedness actions within a district is significant but can be difficult to prioritize.
4. Many activities require popular participation and should be focus on the family or community, which requires time and effort to effectively organize.
5. The local commercial sector is cost-conscious and tends to avoid investments in activities which do not immediately improve profits.

A set of possible district-level approaches to mitigation, prevention and preparedness are summarized below based on these realities. These approaches need to be reviewed at the district and state level and, to the degree possible, harmonized vertically within the government structure and across public and private sector organizations and districts. At the same time, the focus of efforts can vary between and even within districts depending on their particular hazards, risks and vulnerabilities.

One approach to developing this harmonization is to hold a state-district conference on mitigation, preparedness and prevention, complemented by annual review workshop. The initial conference would define and harmonize policies, procedures and approaches vertically and horizontally. The workshop would serve to recognize progress and adjust plans to take into account changing local and state-level conditions.

District-level Approaches to Mitigation, Prevention and Preparedness

Preventive measure (for all disasters)

Preventive actions have 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. The district can avail itself of four mechanisms (singularly or together) to reduce risk and vulnerability.

1. Long term planning for mitigation, preparedness and prevention investments in the district,
2. Enforcement of regulations, particularly Structural-building and safety codes and land use plans,
3. Review and evaluation of development plans and activities to identify ways to reduce risks and vulnerability, and,

4. Capacity building, including warning, the provision of relief and recovery assistance and community-level identification of risk and 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. Base on the interim assessment of risk and vulnerabilities, the Gir Somnath District will focus on the following areas for mitigation, preparedness and prevention;

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

Mitigation measure (for all disasters)

Town and Country Planning Acts and their related provisions:

The Department of Disaster Management, being a member of all regulatory bodies will coordinate with the Town & Country Planning Board and constitute a committee of experts to evaluate the provisions of the State Town & Country Planning Act in place. The Committee will consist of experts from the fields of disaster management, town and country planning and legal experts and will be chaired by the State Relief Commissioner.

Zoning Regulations and their related provisions:

The State Urban Development Department, in consultation with the Department of Disaster Management will constitute a committee of experts with, members from the Institute of Town Planners, town development, State Pollution Control Board, Chairpersons of major Development Authorities/Notified Area Authorities, eminent faculty from planning, architecture and civil engineering departments of engineering colleges, eminent resource persons and such other experts nominated from time to time to study the existing zoning regulations and suggest necessary amendments to incorporate components for vulnerability reduction The State Chief Town Planner will be the Convener of the Committee

Development Control regulations:

The same committee of experts constituted to evaluate the zoning regulations will also evaluate the development control regulations and suggest measures to incorporate the disaster management concerns into them.

Government-sponsored programmers and schemes:

The State Planning Department will prepare a report on the government sponsored programmers, schemes running in the State and how far each programme/scheme addresses the issue of disaster management, and submit to the

government. The Disaster Management Group which is constituted under the chairmanship of the Chief Secretary with concern Secretaries of the Departments of Disaster Management, Urban Development, Rural Development, Health, Home, Finance, Science & Technology, Transport, and Agriculture to evaluate and suggest disaster mitigation measures to be incorporated.

Community Warning system-Early Warning System (EWS)

It is often observed that communities living in remote and isolated locations do not receive timely and reliable warnings of impending disasters. Hence, it is necessary to have robust and effective early warning systems, which can play crucial role in saving lives and limiting the extent of damage to assets and services. Outreach and reliability of warnings are key factors for planning and implementing response measures. Post disaster advisories like information on rescue, relief and other services are important to ensure law, order, and safety of citizens.

Early Warning Action Plan

Type of Action	Flood	Cyclone	Chemical and industrial accidents	Tsunami
Existing EWS	Irrigation department /dam authority/ IMD ↓ Collector ↓ Mamlatdar/TDO ↓ Villages	IMD ↓ Collector ↓ Mamlatdar/TDO ↓ Villages	Industrial Association/industries ↓ DCG ↓ LCG ↓ Mamlatdar ↓ Villages	IMD ↓ Collector ↓ Mamlatdar /TDO ↓ Villages
Responsible Agency for warning dissemination	DDMC Mamlatdar office/TDO VDMC	DDMC Mamlatdar office/TDO VDMC	DDMC Mamlatdar office/TDO VDMC	DDMC Mamlatdar office/TDO VDMC
Trained personnel and operators available (Y/N)	Yes	Yes	No (Team to be formed and trained)	No (Team to be formed and trained)
Villages covered	All risk prone villages			

<i>Villages/habitation not covered or difficult to access</i>	<i>Communities in remote locations (fisher folk, salt pan workers, maldharis etc) VDMC</i>
<i>Measures required to improve timeliness and outreach (For example, voice enabled SMS)</i>	<i>Contact of communities in remote locations (fisher folk, saltpan workers, Maldharis etc)</i>

During and Post Disaster Advisory Action Plan

Type of Hazard	Flood	Cyclone	Earthquake	Drought	Chemical and industrial accidents	Tsunami
<i>Responsible Agency</i>	<i>DDMC, Mamlatdar office & TDO</i>					
<i>Villages covered</i>	<i>All risk prone villages</i>					
<i>Villages/habitation not covered or difficult to access</i>	<i>communities in remote locations (fisher folk, salt pan workers, Maldharis etc)</i>					
<i>Measures required for outreach</i>	<i>Contact of communities in remote locations (fisher folk, salt pan workers, Maldharis etc)</i>					

Procurement various Resource : -

Provide logistical support to government and agencies for procurement of relief goods, transportation, Tents, blankets, tarpaulins, equipment etc, and monitoring illegal price escalations, stocking etc. during crisis. DDMA and other local authority should do procurement of such resource and If they have such resource so keep them in ready to use in disaster situation.

Protocol and arrangement for VIP Visit

It is important that immediately inform VIPs and VVIPs on impending disasters and current situation during and after disasters. Appeals by VIPs can help in controlling rumors and chaos during the disaster. Visits by VIPs can lift the morale of those affected by the disaster as well as those who are involved in the response. Care should be taken that VIP visits do not interrupt rescue and life saving work. Security of VIPs will be additional responsibility of local police and Special Forces. It would be desirable to restrict media coverage of such visits, in which case the police will liaise with the government press officer to keep their number to minimum.

Media Management

The role of media, both print and electronic, in informing the people and the authorities during emergencies becomes critical, especially the ways in which media can play a vital role in public awareness and preparedness. Media through educating the public about disasters; warning of hazards; gathering and transmitting information about affected areas; alerting government officials, helping relief organizations and the public towards specific needs; and even in facilitating discussions about disaster preparedness and response. During any emergency, people seek up-to-date, reliable and detailed information.

The State Government has established an effective system of collaborating with the media during emergencies. At the State Emergency Operation Centre (SEOC), a special media cell has been create which is made operational during emergencies. Both print and electronic media are regularly brief at predetermined time intervals about the events as they occur and the prevailing situation on ground. A similar set up is also active at the District Emergency Operation Centre (DEOC).

Documentation

Documentation is very important activity in disaster management. DDMA also appoint duty for Documentation to the information department. Documentation should be in good manner. It can be in summary and detail form. It is reliable and authenticate.

CHAPTER - 6

Response Measures (Multi-Hazard):

Response measures are those which are taken instantly prior to, and following, a disaster aimed at limiting injuries, loss of life and damage to property and the environment and rescuing those who are affected or likely to be affected by disaster. Response process begins as soon as it becomes apparent that a disastrous event is imminent and lasts until the disaster is declared to be over. Since response is conducted during periods of high stress in a highly time-constrained environment and with limited information and recourses (in majority of the cases), it is by far, the most complex of four functions of disaster management. Response includes not only those activities that directly address the immediate needs, such as search and rescue, first aid and shelters, but also includes systems developed to coordinate and support such efforts. For effective response, all the stakeholders need to have a clear perception/vision about hazards, its consequences and actions that need to be taken in the event of it.

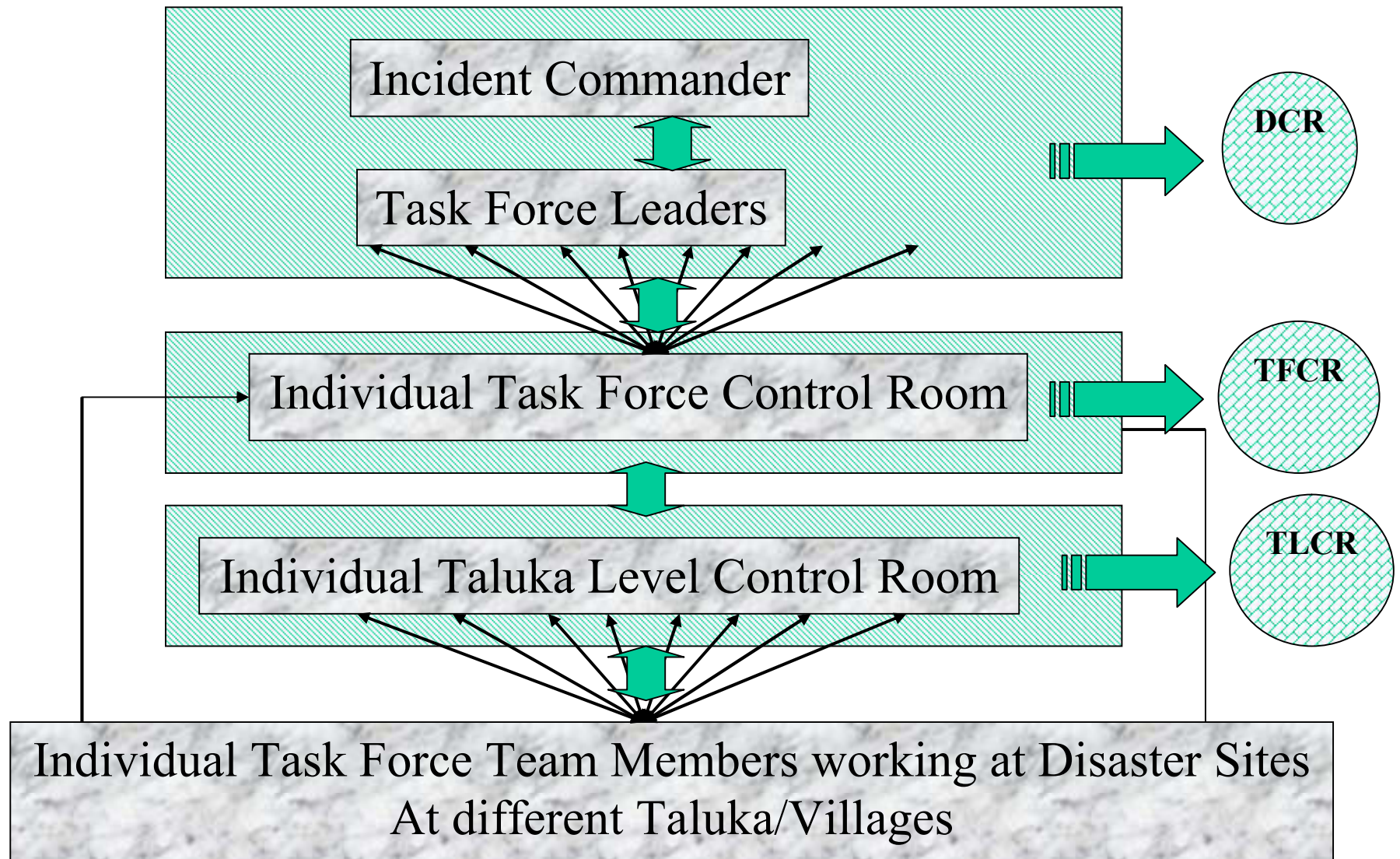
The Revenue Department of the State is the Nodal Department for controlling, monitoring and directing measures for organizing rescue, relief and rehabilitation. All other concerned line departments should extend full cooperation in all matters pertaining to the response management of the disaster whenever it occurs.

The District EOC, ERCs and other control rooms at the District level should be activate with full strength and begun active for search and rescue according disaster.

Response flow chart

Response flow chart on next page

Response flow chart and Communication Flow Chart during Disaster Management



Warning, alert and warning dissemination

On the receipt of warning or alert from any such agency, which is competent to issue such a warning, or on the basis of reports from District Collector of the occurrence of a disaster, the response structure of the State Government will be put into operation. The Chief Secretary/Relief Commissioner will assume the role of the Chief of Operations during the emergency. The details of agencies competent enough for issuing warning or alert pertaining to various types of disasters are given below;

S r. No.	Disaster	Agencies
1	Earthquakes	IMD/ISR
2	Floods	Meteorological Department, Irrigation
3	Tsunamis	IMD/ISR/INCOIS
4	Cyclones	IMD
5	Epidemics	Public Health Department
6	Road Accidents	Police
7	Industrial and Chemical Accidents	DISH, Police, Collector
8	Drought	Agriculture, Scarcity department
9	Fire	Fire Brigade, Police, Collector
10	Rail Accident	Railways, Police, Collector
11	Air Accident	Police, Collector, Airlines
12	Ammunition Depot-Fire	Army, Police, Collector.

1. *Cyclone/flood forecasting is generally the responsibility of the Indian Meteorological Department (IMD). IMD is the nodal agency for providing cyclone-warning services. IMD 's INSAT satellite based Cyclone Warning Dissemination System (CWDS) is one of the best currently in use in India to communicate cyclone warnings from IMD to community and important officials in areas likely to be affected directly and quickly. There are 19 CWDS stations in Gujarat.*

2. After getting information from IMD, warning dissemination is a responsibility of State Government (COR). The COR under the Revenue Department is responsible for disseminating cyclone warnings to the public and Line Departments.

3. On receiving an initial warning, the office of the COR disseminates the warning to all Line Departments, the District administration and DG Police. Warning messages are transmitted through wireless to all districts and Talukas. District Collectors are provided with satellite phones and a Ham radio to maintain effective communication, even if terrestrial and cell-phone communication fails.

4. The state EOC and control rooms of the other line departments at the State level as well as district level also get the warnings. The control rooms are activated on receiving the warnings.

District CMG meeting

At the District level, the District Crisis Management Group (DCG) is an apex body to deal with major chemical accidents, disaster and to provide expert guidance for handling them. DCG has a strength of 34 members which includes District Collector, SDM and Dy. Collector, DDO, Dy. Director – Industrial Safety & Health, DSP, PI, Fire Superintendent of the City Corporations or important Municipalities, Chief District Health Officer, Civil Surgeon, SE, Chief Officer, Dy. Chief Controller of Explosives, Commandant – SRPF, Group-I, Dy. Director – Information to name a few. At Taluka level Local Crisis Management Group (LCG) is formed for coordination of activities and executing the operations. DCGs as well as LCG. meeting will meet periodically twice in a year.

Activation of EOC

Emergency Operation Center (EOC) is a physical location and normally includes the space, facilities and protection necessary for communication, collaboration, coordination and emergency information management.

The EOC is a nodal point for the overall coordination and control of relief work. In case of a Level 1 Disaster the Local Control room will be activate, in case of a Level 2 disaster DEOC will be activated along inform with the SEOC.

Resource Mobilization

Any disaster happens in district so resources are very important for response disaster. Resource mobilization is one of most important crucial activity. As mansion

above about IDRN and SDRN portal are have information regarding which kind of resource are available and location of its. IDRN and SDRN should use for resource mobilization. DDMC, TDMC, CDMC and VDMC should be update regularly.

Media Management

The role of media, both print and electronic, in informing the people and the authorities during emergencies becomes critical, especially the ways in which media can play a vital role in public awareness and preparedness through educating the public about disasters; warning of hazards; gathering and transmitting information about affected areas; alerting government officials, helping relief organizations and the public towards specific needs; and even in facilitating discussions about disaster preparedness and response. During any emergency, people seek up-to-date, reliable and detailed information.

The State Government has established an effective system of collaborating with the media during emergencies. At the State Emergency Operation Centre (SEOC), a special media cell has been created which is made operational during emergencies. Both print and electronic media is regularly briefed at predetermined time intervals about the events as they occur and the prevailing situation on ground. A similar set up is also active at the District Emergency Operation Centre (DEOC).

Media can play crucial role during response time. Media management to ensure precise communication of the impact of disaster and relief measures being taken and generate goodwill among community and other stakeholders;

Emergency Response Functions:

Responsible for assuring specific operations according to objectives and plans to address the immediate impacts of the incident. Taskforces under the operation section will deal with specific functional tasks, such as search and rescue, the provision of water or shelter. The composition and size of these taskforces depends on the nature of the incident.

The District administration of Gir Somnath has identified 16 expected task forces for key response operation functions that are describe below. Additional taskforces can be added under the operations section as needed by the circumstances of a disaster. Each Taskforce is led by one organization and supporter by other organizations.

Emergency Operation Taskforce Functions

Sr. No.	Emergency Operation Taskforce	Functions
1	Coordination and Planning	Coordinate early warning, Response & Recovery Operations
2	Administration and Protocol	Support Disaster Operations by efficiently completing the paper work and other Administrative tasks needed to ensure effective and timely relief assistance
3	Warning	Collection and dissemination of warnings of potential disasters
4	Law and Order	Assure the execution of all laws and maintenance of order in the area affected by the incident.
5	Search and Rescue (including Evacuation)	Provide human and material resources needed to support 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 as appropriate.
8	Food and Relief Supplies	Assure the provision of basic food and other relief needs in the affected communities.
9	Power	Provide the resources to reestablish normal power supplies and systems in affected communities.

10	Public Health and sanitation	Provide personnel and resources to address pressing public health problems and re-establish normal health care systems.
11	Animal Health and Welfare	Provision of health and other care to animals affected by a disaster
12	Shelter	Provide materials and supplies to ensure temporary shelter for disaster-affected populations
13	Logistics	Provide Air, water and Land transport for evacuation and for the storage and delivery of relief supplies in coordination with other task forces and competent authorities.
14	Survey (Damage Assessment)	Collect and analysis 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 Information)	Provide liaison with and assistance to print and electronic media on early warning and post-disaster reporting concerning the disaster.

The specific response roles and responsibilities of the taskforces indicated above is that these roles and responsibilities will be execute and coordinated through the ICS/GS system. For example, in flood, search & rescue would come under the Operations section, Transport would come under the Logistics Section and Public Information under the Public Information Unit.

Each Department and Government agency involved in Disaster Management and Mitigation will:

- Designate a Nodal officer for emergency response and will act as the contact person for that department/agency □
- Ensure establishment of fail-safe two-way communication with the state, district and other emergency control rooms and within the organization.
- Emphasis on communication systems used regularly during LO with more focus on the use of VHF's with automatic repeaters, mobile phones with publicized numbers, VHF radio sets etc. It should be remembered that SAT phones fail during prolonged emergencies and electric failure if the phones cannot be re-charged.
- Work under the overall supervision of the IC / the District Collectors during emergencies.

Other Departmental plan incorporated in DMRP

Agriculture

Prevention Activities:

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

Preparedness Activities before disaster seasons

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

Response Activities:

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

Recovery Activities

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

Health Department

Disaster Events

Prevention Activities:

- Assess preparedness levels at State, District and Block levels.
- Identification of areas endemic to epidemics and natural disasters
- Identification of appropriate locations for testing laboratories
- Listing and networking with private health facilities
- Developing a network of volunteers for blood donation with blood grouping data
- Strengthening of disease surveillance, ensuring regular reporting from the field level workers (ANMs / LHV etc) and its compilation and analysis at the PHC and District levels, on a weekly basis (daily basis in case of an epidemic or during natural disasters), forwarding the same to the State Disease Surveillance Cell and monthly feedback from the State to the district and from the District to the PHC

- *Formation of adequate number of mobile units with trained personnel, testing facilities, communication systems and emergency treatment facilities*
- *Identification of locations in probable disaster sites for emergency operation camps*
- *Awareness generation about various infectious diseases and their prevention*
- *Training and IEC activities*
- *Training of field personnel, Traditional Birth Attendants, community leaders, volunteers,*
- *NGOs and CBOs in first aid, measures to be taken to control outbreak of epidemics during and after a disaster, etc*
- *Arrangement of standby generators for every hospital*
- *Listing of vehicles, repair of departmental vehicles that will be requisitioned during emergencies for transport of injured*

Preparedness Activities before Disaster Seasons

For heat wave :

Preparation and distribution of IEC materials, distribution of ORS and other life-saving drugs, training of field personnel on measures to be taken for management of patients suspected to be suffering from heatstroke;

For flood and cyclone:

- *Assessment and stock piling of essential medicines, anti snake*
- *venom, halogen tablets, bleaching powders. ORS tablets, Pre-positioning of mobile units at vulnerable and strategic points*

Response activities:

Stock piling of life-saving drugs, detoxicants, anesthesia, Halogen tablets in vulnerable areas

Strengthening of drug supply system with powers for local purchase during Level-0

Situational assessment and reviewing the response mechanisms in known vulnerable pockets

Ensure adequate availability of personnel in disaster site

Review and update precautionary measures and procedures.

Sanitation

- *Dispensing with post-mortem activities during L1, L2 and L3 when the relatives and/or the competent authority are satisfied about cause of death*
- *Disinfections of water bodies and drinking water sources*
- *Immunization against infectious diseases*
- *Ensure continuous flow of information.*

Recovery Activities

- *Continuation of disease surveillance and monitoring*
- *Continuation of treatment, monitoring and other epidemic control activities till the situation is brought under control and the epidemic eradicated*

- *Trauma counseling*
- *Treatment and socio-medical rehabilitation of injured or disabled persons*
- *Immunization and nutritional surveillance*
- *Long term plans to progressively reduce various factors that contribute to high level of vulnerability to diseases of population affected by disasters*

Epidemics

Preventive Activities:

- *Supply of safe drinking water, water quality monitoring and improved sanitation*
- *Vector Control programme as a part of overall community sanitation activities*
- *Promotion of personal and community latrines*
- *Sanitation of sewage and drainage systems*
- *Development of proper solid waste management systems*
- *Surveillance and spraying of water bodies for control of malaria*
- *Promoting and strengthening Primary Health Centers with network of paraprofessionals to improve the capacity of surveillance and control of epidemics*
- *Establishing testing laboratories at appropriate locations to reduce the time taken for early diagnosis and subsequent warning*
- *Establishing procedures and methods of coordination with the Health Department, other local authorities/departments and NGOs to ensure that adequate prevention and preparedness*
- *measures have been taken to prevent and / or minimize the probable outbreak of epidemics*
- *Identification of areas prone to certain epidemics and assessment of requirements to control and ultimately eradicate the epidemic*
- *Identification of appropriate locations and setting up of site operation camps for combating epidemics*
- *Listing and identification of vehicles to be requisitioned for transport of injured animals.*
- *Vaccination of the animals and identification of campsites in the probable areas*
- *Promotion of animal insurance*
- *Tagging of animals*
- *Arrangement of standby generators for veterinary hospitals*
- *Provision in each hospital for receiving large number of livestock at a time*
- *Training of community members in carcasses disposal*

Preparedness activities before disaster seasons

- *Stock piling of water, fodder and animal feed*
- *Pre-arrangements for tie-up with fodder supply units*
- *Stock-piling of surgical packets*
- *Construction of mounds for safe shelter of animals*

- *Identification of various water sources to be used by animals in case of prolonged hot and dry spells*
- *Training of volunteers & creation of local units for carcass disposal*
- *Municipalities / Gram Pranchayats to be given responsibility for removing animals likely to become health hazards.*

Response Activities:

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

Recovery Activities:

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

Water Supplies and Sanitation (GWSSB)

Prevention Activities:

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

Preparedness Activities for disaster seasons

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

Response Activities:

- *Disinfections and continuous monitoring of water bodies.*
- *Ensuring provision of water to hospitals and other vital installations.*
- *Provision to acquire tankers and establish other temporary means of distributing water on an emergency basis.*
- *Arrangement and distribution of emergency tool kits for equipments required for dismantling and assembling tube wells, etc.*
- *Carrying out emergency repairs of damaged water supply systems.*
- *Disinfection of hand pumps to be done by the communities through prior awareness activities & supply of inputs.*
- *Monitoring flood situation.*
- *Dissemination of flood warning.*
- *Ensure accurate dissemination of warning messages to GPs & Taluka with details of flow.*
- *Monitoring and protection of irrigation infrastructures.*
- *Inspection of bunds of dams, irrigation channels, bridges, culverts, control gates and overflow channels.*
- *Inspection and repair of pumps, generator, motor equipments, station buildings.*
- *Community mobilization in breach closure*

Recovery Activities:

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

Police:

Prevention Activities:

- *Keep the force in general and the RAF in particular fighting fit for search, rescue, evacuation and other emergency operations at all times through regular drills.*
- *Procurement and deployment of modern emergency equipments while modernizing existing infrastructure and equipments for disaster response along with regular training and drills for effective handling of these equipments.*
- *Focus on better training and equipments for RAF for all types of disasters.*
- *Rotation of members of GSDRAF so that the force remains fighting fit.*
- *Ensure that all communication equipments including wireless are regularly functioning and deployment of extra wireless units in vulnerable pockets.*
- *Ensure inter changeability of VHF communication sets of police and GSDMA supplied units, if required.*
- *Keeping close contact with the District Administration & Emergency Officer.*

- *Superintendent of Police be made Vice Chairperson of District Natural Calamity Committee.*
- *Involvement of the local army units in response planning activities and during the preparation of the contingency plans, ensure logistics & other support to armed forces during emergencies.*

Response Plan:

- *Security arrangements for relief materials in transit and in camps etc.*
- *Senior police officers to be deployed in control rooms at State & district levels during L 1*
- *level deployment onwards.*
- *Deploy personnel to guard vulnerable embankments and at other risk points.*
- *Arrangement for the safety.*
- *Coordinate search, rescue and evacuation operations in coordination with the administration*
- *Emergency traffic management*
- *Maintenance of law and order in the affected areas*
- *Assist administration in taking necessary action against hoarders, black marketers etc.*

Civil Defense

Prevention Activities

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

Response Activities

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

Fire Services:

Prevention Activities:

- *Develop relevant legislations and regulations to enhance adoption of fire safety measures.*
- *Modernization of fire-fighting equipments and strengthening infrastructure.*
- *Identification of pockets, industry , etc. which highly susceptible to fire accidents or areas, events which might lead to fires, building collapse, etc. and educate people to adopt safety measures. Conduct training and drills to ensure higher level of prevention and preparedness.*

- *Building awareness in use of various fire protection and preventive systems.*
- *Training the communities to handle fire emergencies more effectively.*
- *VHF network for fire services linked with revenue & police networks.*
- *Training of masons & engineers in fireproof techniques.*
- *Making clearance of building plans by fire services mandatory.*

Response Activities:

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

Civil Supplies:

Preventive Activities

- *Construction and maintenance of storage goods storage at strategic locations*
- *Stock piling of food and essential commodities in anticipation of disaster.*
- *Take appropriate preservative methods to ensure that food and other relief stock are not damaged during storage, especially precautions against moisture, rodents and fungus infestation.*

Response Activities

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

Recovery Activities

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

Public Works/ Rural Development Departments

Prevention Activities :

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

Response Activities

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

Recovery Activities:

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

Energy: PGVCL**Prevention Activities:**

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

Response Activities:

- *Disconnect electricity after receipt of warning.*
- *Attend sites of electrical accidents and assist in undertaking damage assessment.*
- *Stand-by arrangements to ensure temporary electricity supply.*

- *Prior planning & necessary arrangements for tapping private power plants like those belonging to ICCL, NALCO, RSP during emergencies to ensure uninterrupted power supply to the Secretariat, SRC, GSDMA, Police Headquarters, All India Radio, Doordarshan, hospitals, medical colleges, Collector Control Rooms and other vital emergency response agencies.*
- *Inspection and repair of high tension lines /substations/transformers/poles etc.*
- *Ensure the public and other agencies are safeguarded from any hazards, which may have occurred because of damage to electricity distribution systems.*
- *Restore electricity to the affected area as quickly as possible.*
- *Replace / restore of damaged poles/ salvaging of conductors and insulators.*

Fisheries

Prevention Activities

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

Response Activities

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

Recovery Activities

Provide compensations and advice to affected individuals, community.

Forest Department

Prevention activities

- *Promotion of shelter belt plantation*
- *Publishing for public knowledge details of forest cover, use of land under the forest department, the rate of depletion and its causes*
- *Keep saws (both power and manual) in working conditions*
- *Provision of seedling to the community and encouraging plantation activities, promoting nurseries for providing seedlings in case of destruction of trees during natural disasters*

Transport Department:

Prevention Activities

- *Listing of vehicles which can be used for emergency operation.*
- *Safety accreditation, enforcement and compliance*
- *Ensuring vehicles follow accepted safety standards.*
- *Build awareness on road safety and traffic rules through awareness campaign, use of different IEC strategies and training to school children.*
- *Ensure proper enforcement of safety regulations*
- *Requisition vehicles, trucks, and other means of transport to help in the emergency operations.*
- *Participate in post impact assessment of emergency situation*
- *Support in search, rescue and first aid.*
- *Cooperate and appropriation of relief materials.*

Recovery Activities

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

Panchayati Raj Institutions

Preventive Activities

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

Response Activities

- *Train up the G.P. Members and Support for timely and appropriate delivery of warning to the community.*
- *Clearance of blocked drains and roads, including tree removal in the villages.*
- *Construct alternative temporary roads to restore communication to the villages.*
- *PRIs to be a part of the damage survey and relief distribution teams to ensure popular participation.*
- *Operation emergency relief centers and emergency shelter.*
- *Sanitation, drinking water and medical aid arrangements.*
- *IEC activities for greater awareness regarding the role of trees and forests for protection during emergencies and also to minimize environmental impact which results owing to deforestation like climate change, soil erosion, etc.*
- *Increasing involvement of the community, NGOs and CBOs in plantation, protection and*
- *other forest protection, rejuvenation and restoration activities.*
- *Plan for reducing the incidence, and minimize the impact of forest fire.*

Response Activities:

- *Assist in road clearance.*
- *Provision of tree cutting equipments*
- *Units for tree cutting and disposal to be put under the control of GSDMA, SRC, Collector during Level 1.*
- *Provision of building materials such as bamboos etc for construction of shelters*

Recovery Activities:

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

Information & Public Relations Department

Prevention Activities

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

Response Activities

- *Setting up of a control room to provide authentic information to public regarding impending emergencies*

- *Daily press briefings at fixed times at district level to provide official version*
- *Media report & feedback to field officials on a daily basis from Level 1 onwards*
- *Keep the public informed about the latest emergency situation (area affected, lives lost, etc).*
- *Keep the public informed about various post-disaster assistances and recovery programmers.*

Revenue Department

- *Co-ordination with Govt. of Gujarat Secretariat and Officers of Govt. of India*
- *Overall control & supervision*
- *Damage assessment, finalization of reports and declaration of Level 1/Level 2 disasters*
- *Mobilization of finance*

Home Department

- *Requisition, deployment and providing necessary logistic support to the armed forces*
- *Provide maps for air dropping, etc.*

Gujarat Disaster Rapid Action Force

Response

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

Reporting

Media & information Management:

Taskforce Leader: District Information Officer

Note: As per the above format the Media taskforce of the district will prepare its taskforce action plan.

➤ Activation of the Plan

The District Disaster Response structure is activated on warning or occurrence of a disaster. Task Forces are activate on a specific request of the District Collector or according to pre-determined SOPs, as appropriate for the nature of the hazard or disaster. Activation can be:

- In anticipation of a District level disaster, or*
- Occur in response to a specific event or problem in the district.*

On activation, coordination of warning and response efforts will operate from the District Control Room and Information Centre (DCIC). The DCIC operations plan and SOPs are providing in Annexure.

To activate a task force, the Collector or designated Incident Commander will issue an activation order. This order will indicate:

- The nature of needs to be addressed*
- The type of assistance to be provided*
- The time limit within which assistance is needed*
- The District or other contacts for the provision of the assistance*
- Other Task Forces with which coordination should take place, and*
- Financial resources available for task force operations.*

Special powers are conferred on Incident Controller during disasters. The Principle organization leading each task force is responsible for alerting the appropriate authority when use of these special powers is required to accomplish warning, relief or recovery objectives give to a task force.

End of Emergency

The end of emergency shall be declared through an ALL CLEAR siren/message. The Incident Controller in consultation with the ICS GROUP leaders shall declare the same once the situation is totally controlled and normalcy is restore.

Humanitarian Relief and Assistance

Response defines provision for assistance/ intervention during and after emergency. Response plan includes clear Incident Command System (ICS) operated through emergency operation centers (EOCs) with effective 3 C (Command, Control and Communication) mechanism. ICS covers early warning, search and rescue, humanitarian assistance, medical response, relief, temporary shelter, water and sanitation, law and order, animal care, public grievance, recovery and rehabilitation.

Specific Task Forces should be formed for Food distribution, drinking water management, medicine and health related facility, clothes distribution and other essential needs.

Helpline

Establish Information/ reception centers and setting up telephone helpline numbers for public utility. True information must be release by media to the concerned person and in case of rescue activity public can call on help line number. in that point of view help line must be activate at DEOC

Arrangement of VIP Visit: -

It is important that immediately inform to VIPs and VVIPs on impending disasters and current situation during and after disasters. Appeals by VIPs can help in controlling rumors and chaos during the disaster. Visits by VIPs can lift the morale of those affected by the disaster as well as those who are involved in the response. Care should be taken that VIP visits do not interrupt rescue and life saving work. Security of VIPs will be additional responsibility of local police and Special Forces. It would be desirable to restrict media coverage of such visits, in which case the police will liaise with the government press officer to keep their number to minimum.

CHAPTER – 7

Recovery Measures:

Recovery is defined as decisions and actions taken after a disaster with a view to “restoring or improving life and assets of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk. Recovery and reconstruction (R&R) or comprehensive rehabilitation is the last step in cycle of disaster management. In addition, this is the phase of new cycle, where the opportunity to reconstruction and rehabilitation should be utilized for building a better and more safe and resilient society.

Strategies for restoring physical infrastructure and lifeline services may be:

Build Back Better:

This ensures greater resilience, preparedness; and minimum loss in an event of future disaster.

Participatory Planning:

Infrastructure improvement measures need to be balanced with, or at least be in line with, the social and cultural needs and preferences of beneficiaries

Coordination:

A plan of recovery will help better coordination between various development agencies.

*Damage Assessment and Needs Assessment shall be the basis of recovery planning
Various Sectors for recovery process may be*

- *Essential Services- Power, Water, Communication, Transport, Sanitation, Health*
- *Infrastructural: Housing, Public Building and Roads*
- *Livelihood: Employment , Agriculture, Cottage Industry, Shops and Establishments*

Basic services such as power, water supply, sanitation, wastewater disposal etc. should be restored in shortest possible time. Alternate arrangement of water supply, temporary sanitation facilities can be sought with help of special agencies.

Special arrangements for provision of essential services should be ensured. It can include creating temporary infrastructure for storage and distribution of water supply, running tankers, power supply and sanitation facilities

Damage Loss Assessment

Restoration of Essential Services and Infrastructure

Following tables are to be filled after an event of disaster

Table No. 7.1
Power

Item/ Services	No. of unit damaged	No of villag es affect ed	Populat ion affecte d	Recover y measure s	Implementi ng agency	Tentativ e Duration (Months)	Budge t
Feeder							
Transformers							
HT Lines							
LT Lines							
Electric Poles							

Note: To be planned after initial damage assessment by departments

Table No. 7.1
Health

Item/ Services	PHC (village name)	CHC	Sub Centre	Drug Store	Recover y Measure s	Implementi ng agency	Tentative Duration (Months)	Bu dget
No of buildings damaged								
No of health centres inaccessibl e								
Refrigerati on and other vital equipment for storage								
Drugs and medicines perished	(Locatio n and qty)							
No of Ambulance damaged								

Note: To be planned after initial damage assessment by departments

Table No. 7.3
Social

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

Village	Men	Women	Children	Total	Recovery Measures	Implementing agency	Tentative Duration (Months)	Budget

Table No. : 7.4
Water Supply

Type	Village	No. of unit affected	Faliya/ Population affected	Recovery Measures	Implementing agency	Tentative Duration (Months)	Budget
Well							
Bore wells							
Pond							
Water Supply Disrupted							
Contamination							
ESR damaged							
GLR Damaged							
Sump damaged							
Pipe lines damaged							
Stand post damaged							
Cattle trough damaged							
Hand pump							

Table No. 7.5
Road and Transport

Road damage	Location	Severity	Km	Recovery Measures	Implementing agency	Tentative Duration (Months)	Budget
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Type	No. of godown damage	Type of grains perished (Ton)	Qty of grain perished (Ton)	Qty of grain at risk (Ton)	Recovery Measures	Implementing Agency	Tentative Duration (Months)	Budget
Civil Supply								
APMC								
Other								
Panchayat								
State Roads								
National Highway								
Nagar Palika								

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

Table No. : 7.6
Communication

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

Table No. : 7.7

Food Supply

List of village affected by disruption in food supply

Table No. : 7.8
Housing

Partial Damage	Fully Damaged / Collapsed	Recovery Measures	Prog. / Scheme	Implementing Agency	Tentative Duration (Months)	Budget
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Kucha	Pucca	Kucha	Pucca					

Table No. : 7.9
Public Utilities

Public Buildings	Partial damage (No. of units)	Fully Damaged/ Collapsed (No. of Unit)	Recovery Measures	Prog/ Scheme	Implementing Agency	Tentative Duration (Months)	Budget
<i>Panchayat</i>							
<i>Educational Buildings</i>							
<i>Aanganwadi</i>							
<i>Hospitals</i>							
<i>Office Buildings</i>							
<i>Market</i>							
<i>Police station</i>							
<i>Community Halls/ Function plots</i>							

Table No. : 7.10
Restoration of Livelihood
Provisioning of Employment

Occupational category	No. of workers	Implementing Agency	Tentative Duration (Months)	Budget
<i>Skilled labourers</i>				
<i>Unskilled and Agricultural laborers</i>				
<i>Small and marginal farmers</i>				
<i>Construction workers</i>				
<i>Salt pan workers</i>				
<i>Fisher folk</i>				
<i>Weavers</i>				
<i>Other artisans</i>				

Table No. : 7.11
Land Improvement

Land erosion / siltation (Hectare)	HHs affected	Recovery Measures	Implementing Agency	Tentative Duration (Months)	Budget

Table No.:7. 12
Agricultural

Crop failure (Hectare)	HHs affected	Recovery Measures	Implementing Agency	Tentative Duration (Months)	Budget

Table No. : 7.13

Nonfarm livelihood

Cottage Industry	Extent of damage/disruption		Recovery Measures	Implementing Agency	Tentative Duration (Months)	Budget
	Tools and equipment (Specify no. and type)	Goods and material (Specify type and qty)				
<i>Handloom</i>						
<i>Pottery</i>						
<i>Food Processing</i>						
<i>Diamond sorting etc</i>						
<i>Printing/ Dying</i>						
<i>Other</i>						

Table No. :7.15**Shops and establishment**

Extent of damage/disruption			Recovery Measures	Implementing Agency	Tentative Duration (Months)	Budget
Building (No. and location)	Tools and equipments (Specify no. and type)	Goods and materials (Specify type and qty)				

Long-term recovery programme

Disaster recovery typically occurs in phases, with initial efforts dedicated to helping those affected meet immediate needs for housing, food and water. As homes and businesses are repaired, people return to work and communities continue with cleanup and rebuilding efforts. Many government agencies, voluntary organizations, and the private sector cooperate to provide assistance and support.

Some individuals, families and communities that are especially hard hit by a disaster may need more time and specialized assistance to recover, and a more formalized structure to support them. Specialized assistance may be needed to address unique needs that are not satisfied by routine disaster assistance programs. It may also be required for very complex restoration or rebuilding challenges. Community recovery addresses these ongoing needs by taking a holistic, long-term view of critical recovery needs, and coordinating the mobilization of resources at the, and community levels.

Oftentimes, committees, task forces or other means of collaboration formed with the goals of developing specific plans for Community recovery, identifying and addressing unmet or specialized needs of individuals and families, locating funding sources, and providing coordination of the many sources of help that may be available to assist. Some collaboration focuses on the community level and relies on the expertise of community planning and economic development professionals. Other collaborations focus on individual and family recovery and are coordinate by social service and volunteer groups. All such efforts hope to lay the groundwork for wise decisions about the appropriate use of resources and rebuilding efforts.

Under the National Response Framework, Emergency Support Function (ESF) #14 Community Recovery coordinates the resources of federal departments and agencies to support the long-term recovery of States and communities, and to reduce or eliminate risk from future incidents. While consideration of long-term recovery is imbedded in the routine administration of the disaster assistance and mitigation

programs. some incidents, due to the severity of the impacts and the complexity of the recovery, will require considerable interagency coordination and technical support.

ESF #14 efforts are driven by State/local priorities, focusing on permanent restoration of infrastructure, housing, and the local economy. When activated, ESF #14 provides the coordination mechanisms for the Federal government to:

- Assess the social and economic consequences in the impacted area and coordinate Federal efforts to address Community recovery issues resulting from an Incident of National Significance;
- Advise on the Community recovery implications of response activities, the transition from response to recovery in field operations, and facilitate recovery decision-making across ESFs;
- Work with State, local, and tribal governments; NGOs; and private-sector organizations to conduct comprehensive market disruption and loss analysis and develop a forward looking market-based comprehensive long-term recovery plan for the affected community;
- Identify appropriate Federal programs and agencies to support implementation of the Community recovery plan, ensure coordination, and identify gaps in resources available;
- Avoid duplication of assistance, coordinate to the extent possible program application processes and planning requirements to streamline assistance, and identify and coordinate resolution of policy and program issues; and
- Determine/identify responsibilities for recovery activities, and provide a vehicle to maintain continuity in program delivery among Federal departments and agencies, and with State, local, and tribal governments and other involved parties, to ensure follow-through of recovery and hazard mitigation efforts.

Grievances Redressed System

Grievance redressed is important aspect in the context of providing need based assistance to affected communities with transparency and accountability. It is also ensures the protection of their rights and entitlements for disaster response services.

Grievance Redressed System

No.	Key Person/ Establishment	Contact No	Address
1	DEOC/ RAC	02876-1077	Collector Office-District Emergency Operation centre
2	DDO	02876-249255	District Panchayat
3	Police	02876-222250	S.P. Office, Gir Somnath

Matrix form of Sort term and long-term recovery programme

Disaster recovery has three distinct but interrelated meanings. First, it is a goal that involves the restoration of normal community activities that were disrupted by disaster impacts – in most people’s minds, exactly as they were before the disaster struck. Second, it is a phase in the emergency management cycle that begins with stabilization of the disaster conditions (the end of the emergency response phase) and ends when the community has returned to its normal routines. Third, it is a process by which the community achieves the goal normal life.

SHORT TERM AND LONG TERM RECOVERY TIME TABLE

Recovery and Reconstruction

Activity/Action	Estimate of Duration	Estimate of Duration
Period	Short-Term	Long-Term
<i>Warning</i>	<i>Hours to a few days</i>	
<i>Response/Operations</i>	<i>Ongoing</i>	<i>Ongoing</i>
<i>Emergency</i>	<i>1-15 days</i>	<i>1-60 days</i>
<i>Preparation of damage assessment</i>	<i>1-4 days</i>	<i>4-8 days</i>
<i>Disaster declaration (state or federal)</i>	<i>1-10 days</i>	<i>0-30 days</i>
<i>Federal/State mitigation Strategy</i>	<i>1-15 days</i>	<i>15-30 days</i>
<i>Recovery</i>	<i>7-150 days</i>	<i>150-365 days</i>
<i>Temporary building moratorium</i>	<i><=30 days</i>	<i><=60 days</i>
<i>Letter of intent to submit HM Grant</i>	<i><=60 days</i>	<i><=60 days</i>
<i>Short-term reconstruction</i>	<i><= 1 year</i>	<i>200-365 days</i>
<i>State mitigation</i>	<i><= 180 days</i>	<i>365 days</i>
<i>HMGP proposal</i>	<i>70-200 days</i>	<i>200-365 days</i>
<i>Long-term reconstruction</i>	<i>100 days to 5 years</i>	<i>5 to 10 years</i>

CHAPTER – 8

Financial Arrangements:

To ensure the long-term sustenance and permanency of the organization funds would be generated and deployed on an ongoing basis. There are different ways to raise the fund in the State as described below

State Disaster Response Fund

To carry out Emergency Response & Relief activities after any disaster the State Disaster Response Fund is making available to Commissioner of Relief, Revenue Department under which the Central Government will share 75% and the Govt. of Gujarat has to share 25% as per the recommendation of 13th Finance Commission.

State Budget

The Authority, submit to the State Government for approval a budget in the prescribed form for the next financial year, showing the estimated receipts and expenditure, and the sums which would be required from the State Government during that financial year. As per the provisions of The Gujarat State Disaster Management Act, 2003 the Authority may accept grants, subventions, donations and gifts from the Central or State Government or a local authority or any individual or body, whether incorporated or not.

District Planning Fund

For preparedness, mitigation, capacity building and recovery fund can be raised from MP or MLA grant as received for developmental work .also from departmentally arrangement.

Partnerships

There are projects/schemes in which funding can be done by a public sector authority and a private party in partnership (also called on PPP mode funding). In this State Govt. along with Private organizations and with Central Govt., share their part.

Centrally Sponsored scheme

Name	Purpose	Finance Arrangements	Activities that can be take under scheme	Nodal Agency
NDRF (NCCF)	Relief Assistance	100% Central Govt	Cash and kind relief	Revenue Department
SDRF (CRF)	Relief Assistance	75% Centre, 25% State	Cash and kind relief	Revenue Department
Planning Commission (13 Finance commission) Year 2011-15	Capacity Building	100% Centre	Trainings Awareness Generation IEC material Mock drills	Revenue Department

Disaster Insurance

Risk Transfer / Risk Distribution

Risk transfer or risk distribution refers to compensation cover against loss of life or assets in case of any disaster event. Insurance and reinsurance mechanisms and products against natural and manmade disasters have rapidly evolved in last decade. According to UNISDR, "Insurance is a well-known form of risk transfer, where coverage of a risk is obtained from an insurer in exchange for ongoing premiums paid to the insurer. Risk transfer can occur informally within family and community networks where there are reciprocal expectations of mutual aid by means of gifts or credit, as well as formally, where governments, insurers, multi-lateral banks and other large risk-bearing entities establish mechanisms to help cope with losses in major events. Such mechanisms include insurance and re-insurance contracts, catastrophe bonds, contingent credit facilities and reserve funds, where the costs are covered by premiums, investor contributions, interest rates and past savings. Linkages with government insurance schemes like Rashtriya Swasthya Bima Yojana, Aam Admi Bima Yojana can be extensively taken up for risk transfer. Linkages can be done for teaching staff and children with existing insurance schemes. Livestock insurance can also be taken up through animal husbandry department. Coverage of crop insurance should be increased specifically for small and marginal farmers. Weather/rainfall insurance can also be explored with various existing schemes. (DDMC should draw up their own risk transfer/distribution framework and action plan in this regard)

CHAPTER – 9

Maintenance of Plan :

- **Authority for maintaining and reviewing the plan:**

(According to ACT No. 31 of 2005 – The Disaster Management Act, 2003, Chapter IV, District Plan.)

31. District Plan.-

- (1) There shall be a plan for disaster management for every district of the State.*
- (2) The District Plan shall be prepared by the District Authority, after consultation with the local authorities and having regard to the National Plan and the State Plan, to be approved by the State Authority.*
- (3) The District Plan shall include-*
 - (a) the areas in the district vulnerable to different forms of disasters;*
 - (b) the measures to be taken, for prevention and mitigation of disaster, by the Departments of the Government at the district level and local authorities in the district;*
 - (c) the capacity-building and preparedness measures required to be taken by the Departments of the Government at the district level and the local authorities in the district to respond to any threatening disaster situation or disaster;*
 - (d) the response plans and procedures, in the event of a disaster, providing for-*
 - (i) allocation of responsibilities to the Departments of the Government at the district level and the local authorities in the district;*
 - (ii) prompt response to disaster and relief thereof;*
 - (iii) procurement of essential resources;*
 - (iv) establishment of communication links; and*
 - (v) the dissemination of information to the public;*
 - (e) such other matters as may be required by the State Authority.*
- (4) The District Plan shall be reviewed and updated annually.*
- (5) The copies of the District Plan referred to in sub-sections (2) and (4) shall be made available to the Departments of the Government in the district.*
- (6) The District Authority shall send a copy of the District Plan to the State Authority which shall forward it to the State Government.*
- (7) The District Authority shall, review from time to time, the implementation of the Plan and issue such instructions to different departments of the Government in the district as it may deem necessary for the implementation thereof.*

Annual Plan Maintenance

DDMC shall compile its learning and proposed new mechanisms for improvement of the capacity to deal with disasters.

Schedule for updation of plan

Every year as a part of pre monsoon DDMC will update plan in the month of May-June and revise in the month of October-November every year

Plan Maintenance is a dynamic process of updating pal on a periodic basis. It is based on learning and from the last disaster (As per under Mention) and mock drill exercise.

<i>Major Learning based on experience of last disasters and mock drills (on planning/implementation/c compliance)</i>	<i>Revisions adopted/proposed</i>	<i>Remarks</i>
<i>Flood</i>	<i>May-June</i>	<i>Highly affected area of the district</i>
<i>Chemical disaster</i>	<i>Jan, Feb</i>	<i>Due to MAH unit (Under Factory act-1947)</i>
<i>Tsunami</i>	<i>June, Oct</i>	<i>Due to coastal belt</i>
<i>Cyclone</i>	<i>May- June and Oct. Nov.</i>	<i>Due to Coastline</i>

Prepared By DDMC Members, Gir Somnath

Certified/ Approved By _____ Collector Gir Somnath

Annexure



ANNEXURE - 1



DISTRICT PROFILE:

- **History of Gir Somnath**

Gir Somnath is at south-western of Gujarat state & west-central of India. The District is located on 20.03° to 21.95° North latitude and 70.09° to 71.20° east longitude shows location on an interactive map. It lies on the costal belt from Una to Veraval and consisting the most Famous Somnath Temple and the Forest of Sasan Gir of the Kathiawar Peninsula. The many temples in the vicinity reveal the city's long and complex history.

Accession of Junagadh to India

During the period spanning the independence and partition of India and Pakistan in 1947, the 562 princely states that had existed outside British India under British suzerainty were given a choice of acceding to either India or Pakistan or remaining outside them.

On September 15, 1947, Nawab Mohammad Mahabat Khanji-III of Junagadh, a princely state located on the south-western end of Gujarat and having no common border with Pakistan, chose to accede to Pakistan ignoring Mountbatten's views, arguing that Junagadh adjoined Pakistan by sea. The rulers of two states that were subject to the suzerainty of Junagadh — Mangrol and Babariawad — reacted by declaring their independence from Junagadh and acceding to India. In response, the nawab of Junagadh militarily occupied the two states. Rulers of the other neighbouring states reacted angrily, sending troops to the Junagadh frontier, and appealed to the Government of India for assistance. A group of Junagadhi people, led by Samaldas Gandhi, formed a government-in-exile, the "Aarzi Hukumat" ("temporary government").

A plebiscite was conducted in February 1948, which went almost unanimously in favour of accession to India. Junagadh became a part of the Indian state of Saurashtra until 1 November 1956, when Saurashtra became part of Bombay state. In 1960, Bombay state was split into the linguistic states of Maharashtra and Gujarat, in which Junagadh was located.

Junagadh districts come into existence from date 19/4/1949 by merger of Junagadh and surrounding Deshi Rajwadas. In these Rajwadas Junagadh, Manavadar, Mangrol, Bantwa and Sardargadh were prominent. After the reorganization of Districts in 1997, the area of Junagadh was 8881.8 sq.k.m. As Porbandar District was split from Junagadh and came in existence from dated 02-10-97, then after total area of Junagadh District was 8782.07 sq. k.m.

Again in 2013 Gir Somnath District is come in to existance from 15-08-2013 by splitting the Junagadh District. Total area of newly fomed Gir Somnath district is 3754.50 Sq. Km.

- **Introduction of Gir Somnath**

As per administrative view, this district is distributed in Veraval and Una Subdivisions. Among these 2 sub-divisions there are 6 taluka. In east Amreli district, in north Junagadh district and in southern and western direction it is covered by Arabian Sea. District is at top in natural beauty with Gir's jungles (forests), mountains region and wide groups of rivers flowing through them. District is world famous for its Asiatic lions-vanraaj (king of jungle). This is a lucrative attraction for foreign tourists. According to Vedas, India's first among 12 Jyotirlings "Kal Bhairav" is present in Somnath Temple at Veraval in Gir Somnath district. Besides this Bhalka tirth and Dehotsarg are also famous religious and historically important places are in Veraval.

The Gir Forest National Park and Wildlife Sanctuary (also known as Sasan-Gir), is a forest and wildlife sanctuary in Gujarat, India. Established in 1965, with a total area of 1412 km² (about 258 km² for the fully protected area (the national park) and 1153 km² for the Sanctuary), the park is located 65 km to the south-east of Junagadh and 60 km to south west of Amreli.

It is the sole home of the Asiatic Lions and is considered to be one of the most important protected areas in Asia due to its supported species. The forest area of Gir and its lions were declared as "protected" in the early 1900s by the Nawab of the princely state of Junagadh. This initiative assisted in the conservation of the lions whose population had plummeted to only 15 through slaughter for trophy hunting.

Water reserves

The seven major perennial rivers of the Gir region are Hiran, Shetrunji, Datardi, Shingoda, Machhundri, Godavari and Raval. The four reservoirs of the area are at four dams, one each on Hiran, Machhundri, Raval and Shingoda rivers, including the biggest reservoir in the area, the Kamleshwar Dam, dubbed 'the lifeline of Gir'.

- **History of Somnath Temple and Timeline**

The Somnath Temple located in the Prabhas Kshetra near Veraval in Saurashtra, on the western coast of Gujarat, India, is one of the twelve Jyotirlinga shrines of the God Shiva. Somnath means "The Protector of (the) Moon God". The Somnath Temple is known as "the Shrine Eternal", having been destroyed many times by various kings and rulers. Most recently it was rebuilt in November 1947, when Sardar Vallabhbhai Patel visited the area for the integration of Junagadh and mooted a plan for restoration. After Patel's death, the rebuilding continued under K. M. Munshi, another minister of the Government of India.

The second temple, built by the Yadava kings of Vallabhi in Gujarat, replaced the first one on the same site around 649 CE.

In 725 CE Junayad, the Arab governor of Sind, sent his armies to destroy the second temple. The Gurjara Pratihara king Nagabhata II constructed the third temple in 815, a large structure of red sandstone.

In 1024, the temple was destroyed by Mahmud of Ghazni who raided the temple from across the Thar Desert. The temple was rebuilt by the Gujjar Paramara King Bhoj of Malwa and the Solanki king Bhimadev I of Anhilwara, Gujrat (present day Patan)

between 1026 and 1042. The wooden structure was replaced by Kumarpal (r.1143-72), who built the temple of stone.

In 1296, the temple was once again destroyed by Sultan Allauddin Khilji's army, and Raja Karan of Gujarat was defeated and forced to flee. According to Taj-ul-Ma'sir of Hasan Nizami, the Sultan boasted that "fifty thousand infidels were dispatched to hell by the sword" and "more than twenty thousand slaves, and cattle beyond all calculation fell into the hands of the victors.". The temple was rebuilt by Mahipala Deva, the Chudasama king of Saurashtra in 1308 and the Linga was installed by his son Khengar sometime between 1326 and 1351.

In 1375, the temple was once again destroyed by Muzaffar Shah I, the Sultan of Gujarat.

In 1451, the temple was once again destroyed by Mahmud Begda, the Sultan of Gujarat.

In 1701, the temple was once again attacked by Mughal Emperor Aurangzeb. As he was staring at the temple his crown fell off which infuriated him. Taking this as his condemnation he tried to destroy but fail to do so. And left it half ruined. Later the temple was rebuilt to its same glory adjacent to the ruined one.

Later on a joint effort of Peshwa of Pune, Raja Bhonsle of Nagpur, Chhatrapati Bhonsle of Kolhapur, Queen Ahilyabai Holkar of Indore & Shrimant Patilbuwa Shinde of Gwalior rebuilt the temple in 1783 at a site adjacent to the ruined temple.

The Deputy Prime Minister of India, Sardar Vallabhbhai Patel came to Junagadh on November 12, 1947 to direct the stabilization of the state and at the same time ordered the reconstruction of the Somanath temple. When Sardar Patel, K. M. Munshi and other leaders of the Congress went to Gandhi with the proposal of reconstructing the Somnath temple, Gandhi blessed the move, but suggested that the funds for the construction should be collected from the public and the temple should not be funded by the state. He expressed that he was proud to associate himself to the project of renovation of the temple But soon both Gandhi and Sardar Patel died and the task of reconstruction of the temple continued under K. M. Munshi, who was the Minister for Food and Civil Supplies in the Nehru Government.

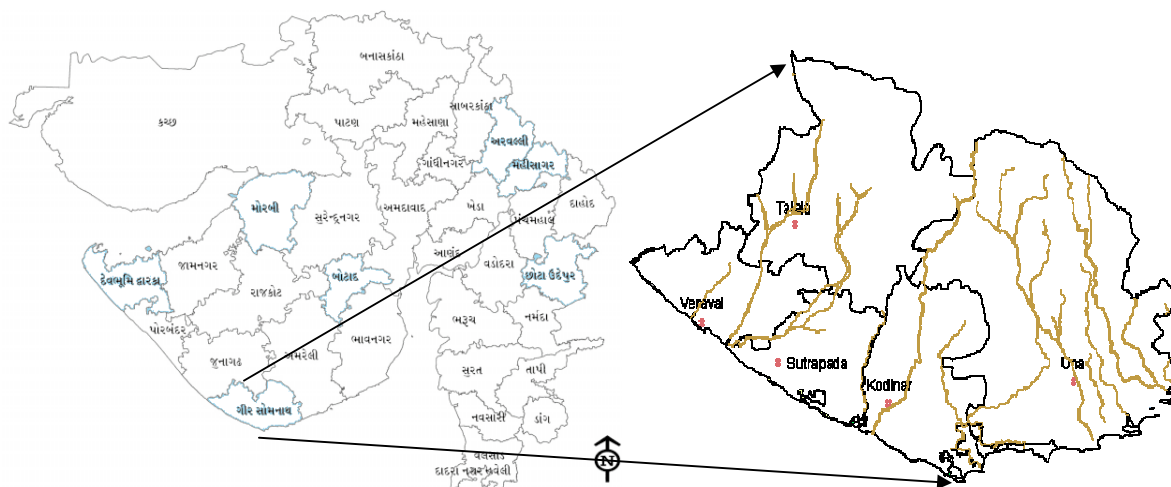
The ruins were pulled down in October 1950 and the mosque present at that site was shifted few miles away. In May 1951, Rajendra Prasad, the first President of the Republic of India, invited by K M Munshi, performed the installation ceremony for the temple. Rajendra Prasad said in his address "The Somnath temple signifies that the power of reconstruction is always greater than the power of destruction"

Architecture of Somnath

The present temple is built in the Chalukya style of temple architecture or Kailash Mahameru Prasad Style and reflects the skill of the Sompura Salats, one of Gujarat's master masons. The temple's shikhara, or main spire, is 150 feet in height, and it has a 27 foot tall flag pole at the top.

The temple is situated at such a place that there is no land in straight-line between Somnath seashore till Antarctica, such an inscription in Sanskrit is found on the Arrow-Pillar called Baan-Stambh erected on the sea-protection wall at the Somnath Temple. This Baan-Stambh mentions that it stands at a point on the Indian landmass, which happens to be the first point on land in the north to the south-pole on that particular longitude.

• **Location of District:**



• **Administrative Set up:**

Gir Somnath District Sub Division Wise Setup			
Veraval Sub Division		Una Sub Division	
Taluka	No. of Villages	Taluka	No. of Villages
Veraval	55	Una	92
Talala	46	Gir-Gadhada	44
Sutrapada	47	Kodinar	61

The New District "GIR SOMNATH" comes into existence with the Rules and Orders made by the Government of Gujarat under the Gujarat Acts of Revenue Department Notification publish in The Gujarat Government Gazette dated 13th August, 2013 with No. GHM/2013/70/M/PFR/102013/139/L.1:- In exercise of the powers conferred by section 7 of the Gujarat Land Revenue Code, 1879 (Bom. V of 1879) and in supersession of all the previous notification so far as they relate to the constitution of Junagadh district, the Government of Gujarat, with effect from the 15th August, 2013 (hereinafter referred to as "the said date:") hereby-

(a) divided the area comprised immediately before the said date in Junagadh district, and constitutes the following two districts, namely:-

1. Gir Somnath district with headquarter at Veraval; and

(b) directs that:

(ii) Gir Somnath district shall consist of the following talukas as constituted immediately before the said date namely:-

(1) Veraval, (2) Kodinar, (3) Sutrapada, (4) Talala, (5) Una (6) Gir Gadhdha

As on now with present district, there are 6 talukas having 345 villages situated in Gir Somnath district. Out of them there are 392 inhabited and 92 are uninhabited

villages. As per political formation, Gir Somnath district have 5 Municipalities and 348 Village Panchayats, out of them 44 Village Panchayats are group village panchayats.

- **Land formation**

This district is situated in the periphery of Gir's famous forest. This district is being agriculturally oriented. District's large portion of population is engaged in agriculture and animal rearing. In this district, Buffaloes are reared in gir forest. By adopting this business, the wealthy people at gir forest sanctuary are given agriculture land by the state government. In spite of all in colonies in ration of organizing colonization is done in forests, by living in jurists, the activity of the forest people can be considered a speciality.

The Land of Gir Somnath is fertile and proportion of production of grains is much more, but the people have no proper planning to get higher productivity of grains. During the Farming season, they are habituated to do more expenditure for getting more productions. Due to that they create some circumstances of financial crisis. Thus, the percentage of farmers who depend on agriculture is very less who can be considered as self reliant. The Land of District mainly can be classified in 5 types; 1. Black Soil proper for Cotton, 2. Medium Black Soil, 3. Fertile Soil, 4. Chunna Patthar wali Jamin (Lime Stone Soil) and 5. Kharashwali Jamin (Salinity Soil).

The belt of land from Patan-Veraval to Una is extremely fertile, which is known as "Lily Nagher". In this District, Land utilised for farming of peanut, cotton, sugarcane, wheat, millet, etc.

- **Rainfall**

During the Monsoon season rain is brought by seasonal winds. Rain lashes it in June's last week till September's last week. Normally, on an average there is 1000 to 1200 mm of rain fall reported in District. The average proportion of rain is higher in gir forest. The average consideration of rainy days is normally between 33-38 days for rains. Moreover rain also comes irregularly. In the year of 2015, Gir Somnath District's average Rain Fall was 666 mm.

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Avg. Rain	876	1019	1706	1142	1439	1578	1063	435	1150	989	666

* Taluka Wise Rain Fall Details available at Annexure-6

Average Rain Fall for Last 10 Years – Gir Somnath District.

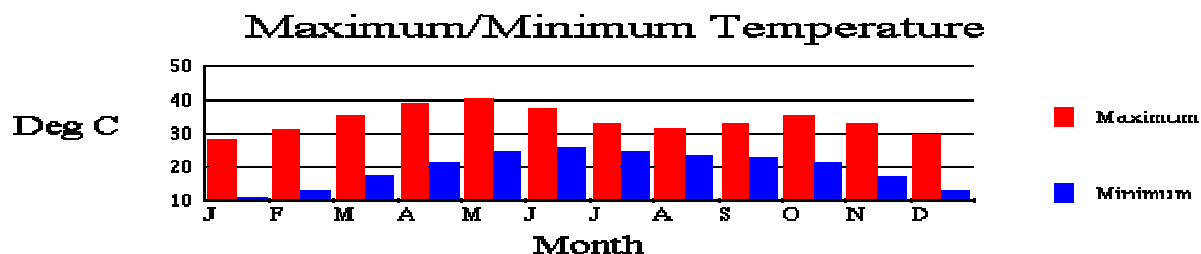


- Rivers and Dams:**

The Most Popular rivers of Gir Somnath District are (1) Hiran, (2) Saraswati, (3) Shingoda, (4) Machhundri and (7) Raval are flowing through district.

There are total 9 Small and Medium size Dams available under observation of Irrigation (State) Branch. Detail of all Dams is mentioned in Annexure-13.

- Weather and Temperature**



There is a much variety of weather shown in district. On one side there is humid weather because of river banks and on the other side there is warm and dry weather because of levelled grounds. In year 2013, the maximum temperature was recorded as 41.8 c° while the minimum temperature was recorded as 7.6 c°. The temperature difference depends upon the geographical circumferences.

- Fishing & Port:**

Gir Somnath District has total 155 km. long costal belt. It Starts on boundary of Amreli, from Sayed Rajpara village of Una Taluka and is up to Vadodara Dodiya village of Veraval Taluka ending at the boundary of Junagadh district. Some good quality fishes are caught from ocean like, pamphlet Chhapari, Paplet, Palvo, Charaki, Dhol, Magra, Jinga etc. The production of Dry fish is carried out in Mul-Dwarka, Saiyad-Rajapara and Nava Bandar villages of district.

Navabandar and Sayed Rajpara of Una Taluka, Veraval, Dhalmej, Sutrapada, and Hirakot are some busiest fish landing centres situated on the costal belt. Brackish water prawns cultivation is also developed in some region of District. At present Prawns cultivated in Kotada, Ghoghala and Vanankbara costal villages. The muddy land of villages like Manekpar, Vasod, Olvan, Paladi, Tad, Bhigarana, Kob and Chikhali provide feasible sites for prawn's cultivation on the coast.

In year 2011-12, fishermen were having 9890 mechanical and 257 non-mechanical boats for catching fishes with production of fishes was 281405 metric tones.

Gujarat Ambuja cement has developed captive jetty at Muldwarka for their cement plant. The main cargo handled at the jetty is coal, cement and clinker. Taluka wise list of coastal villages is attached in Annexure-.

- **Livestock details:**

Livestock details of the District according to 18th Livestock Census-2007 of

Cattle	Buffalo	Sheep	Goat	Horse	Donkey	Camel	Pig	Dog	Rabbit	Poultry
481049	377487	46949	106849	473	625	534	3254	7233	122	67355

Gujarat State.

According to Animal wealth survey 2007, we can know that the animal wealth has been increased at 4.28 % due to the greater facilities is provided in this district. There are 1 veterinary hospital, 42 dispensary, 15 primary animal care centres and 3 branch veterinary hospitals provides services at animal servicing centre with total 62620 animals provided treatment in year 2011-12.

- **Forest**

Total area of the District is 3754.5 sq km out of that total 1230 sq km of land is covered by forest, which is known as gir forest. Main outcome through forest region is construction wood like saag and bamboo and some fruits like Custard Apple, Rayan, Timbru, Karmada etc. are obtained through this area.

The Sasan Gir Lion Sanctuary is home of some 300 Asiatic lions. The sanctuary was created in 1913 to provide protection to the largest surviving groups of the Asiatic lions. It was given the status of the sanctuary in 1965.



The Sasangir National Park accommodates the wild animals like chinkara, wild boar, striped hyena, jackal, common langur, porcupine, hare, black buck and other animals. The Kamleshwar Dam in Sasangir Wildlife Sanctuary is home to the marsh crocodile commonly seen in the river. There is also the only crocodile-breeding farm in this national park at Sasan.

• **Population: (as per census 2011) (*abstract)**

Taluka	Total	Male	Female	Total SC	Total ST	0-6 Years	Above 65
Talala	135731	69833	65898	10451	7672	15016	9558
Patan-Veraval	322492	164466	158026	26790	5798	39228	13756
Sutrapada	141968	72091	69877	14588	1042	18121	6165
Kodinar	228809	115684	113125	35346	1142	28503	11177
Una/Gir Gadhdha	388477	197952	190525	26647	2107	54075	14846
Total	1217477	620026	597451	113822	17761	154943	55502

According to population survey of 2011 for Gir Somnath district, Total population of district is 12.17 lakhs. Out of that there are 6.20 lakh males and 5.97 lakh females. The Literacy Rate of Gir Somnath is 63.1 % and Growth rate is 17.08 %.

Total Population of Scheduled Caste in Gir Somnath District is 1.13 lakhs and Population of Scheduled Tribe in Gir Somnath District is 17,761. According to population survey data-2011, the growth rate of 5 Taluka in Gir Somnath district for decades (2001-2011) is 17.08%. There is an urban population in all 5 Taluka of District. Detail Census is available in Annuxure-2, 3, 4, 5.

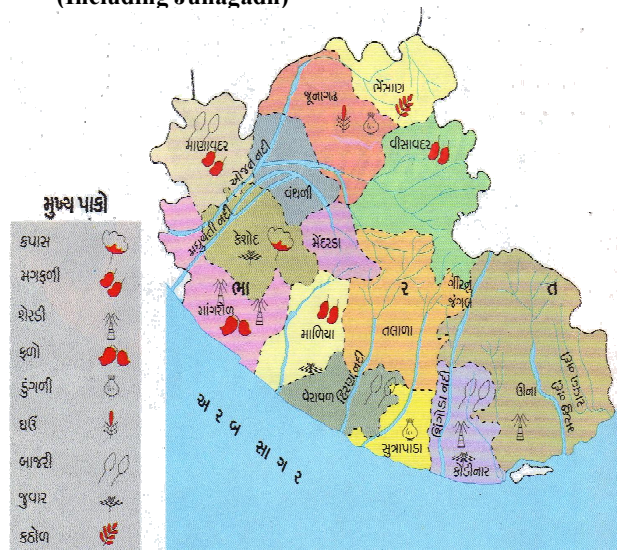
• **Agricultural Land and Cultivation**

During 2011-12, agricultural availability against total land was 794549 hectares. As per use of land there is 6% Forest, 10.10% pasture land, 5.16% non-agricultural use, 15.09% non cultivable land and 4.12% cultivable land.

During the Kharif season main crops are peanut, millet, reasame and Juwar while in Ravi season wheat, Cotton and Millet are major crops. Large scales of Mangos "Ambas" are sawing as "Bagayat" at Talala Taluka. The mango of this area is famous all over the world as "Kesar". Ravna (Jambu) can be available before rainy season which is used in Ayurvedic medicine.

The total area cultivated in Junagadh District during the year 2010-11 for Kharif and Ravi season can be bifurcated as: 18469 hectares of area for Millet, wheat were in 179625 hectares of land utilised in Kharif Season. While for Ravi Season it was bifurcated as: Ravi Juwar is cultivated in 3580 hectares of land, Groundnut and maize crops were in 407230 hectares of

(Including Junagadh)



land and sugarcane was cultivated in 12583 hectares of land.

- **Industry.**

(Including Junagadh)

There are over 40 medium and large scale industries are in Junagadh district, involved in sectors such as; Cement plants, edible oil, refinery plants and fish processing units. Under law of factory act 1948, total no of registered factories are 21 and due to it total 14524 persons get employment. Industries like Peanut oil's mills, sugar factories and soda ash factories are situated in Kodinar, Maliya, Sutrapada, Veraval Taluka. There are over 6,000 Small Scale Industries operating in district at various sectors that includes food products, chemicals, electrical equipments, textiles and repairing & servicing. 3,018 Units of SSI related to repairing & servicing are located in Junagadh followed by food products industry with over 503 units. Most of the small scale industries are located in Keshod, Veraval, Kodinar and Mangrol talukas of the district.

- **Transportation - Roads, Railway, Airport.**

(Including Junagadh)

The Total length of National Highways passed from district is 255 km. (National Highway 8D a length of 116 km, connecting Junagadh with Rajkot, a length of 96 km, National Highway 8E passes through the district connecting it to Bhavnagar and Amreli district. The district is also connected to Jamnagar and Porbandar through NH 8E (Ext.), with a total length of 43 km). District has total 823 km of State highways. District has total 266 km of railway lines includes 106 km of broad gauge, which is directly connected with 47 villages and 7 Cities. The district has also a domestic airport located at Keshod and at DIU connecting it to Porbandar, Rajkot, Ahmedabad and Mumbai.



- **Electrification (Inc. Gir Somnath)**

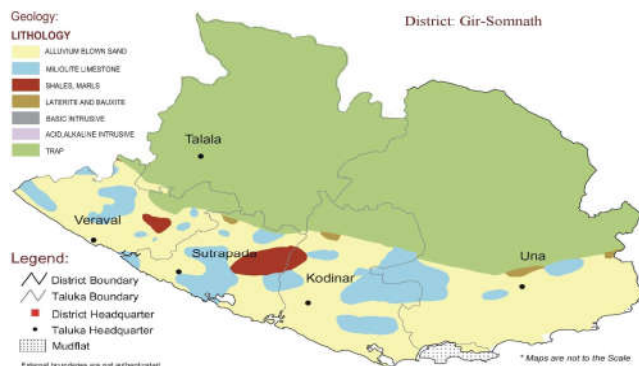
Approximately all villages covered under Jyotigram Yojna including all urban areas where electricity is supplied. In year 2012-13 total 680240 kilo watt electricity was consumed in district. Among it 48.36 % was used for industrial purpose, 5.38 % for Vari home and



general lightening and 28.06 % use was for household, while 7.34 % was for other use. There are total 23 sub-stations in the district including 5 sub-stations of 220 KV, 4 substations of 132 KV and 14 substations of 66 KV each.

- **Mine Minerals**

Lime stone, Challa & Boxite are the main minerals of the district. In year of 2011-12 production of Chuna pathar was registered as 8907451 Metric Tonne, where as production of marble was registered as 1349250 metric tones. The general minerals like House construction stone, black stone, common sand, moram, etc were registered as 6275172 metric tones.

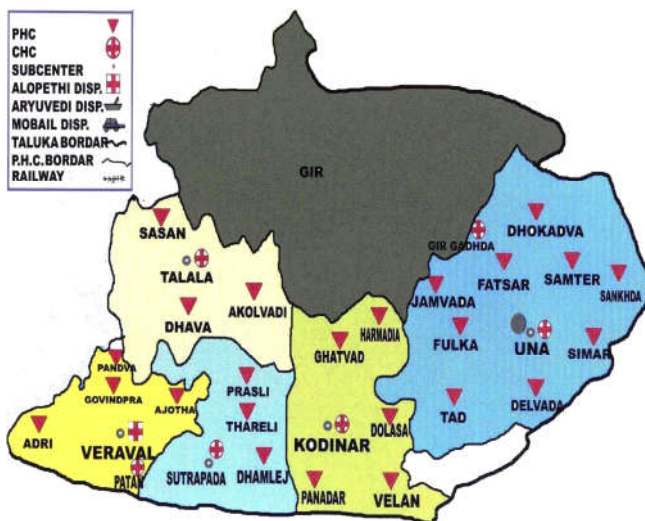


- **Educational facilities**

Total 558 Government primary schools, 12 government middle schools, 120 non-government granted middle schools and 79 non-government non granted middle schools are registered in District. Average 51 primary schools and 13.27 middle schools are available for each 1 lakh population. No village in District is remains without primary school except forest area. Shree Somnath Sanskrit University offers education on Yoga, Veda, Puran, Jyotish etc subjects.

- **Medical and health services**

Health sector of Gir Somnath has 1 Civil Hospital and 8 community health centres available in various talukas. District has total 27 running primary health centres. Patients of Rural area are getting primary treatment, health and family welfare related services along with other health facilities through 2 mobile comprehensive health care units, all primary health centres & sub-health centres. There are total 9 Ambulance available with 108-EMRI for at least one at each Taluka for attending Health Emergencies.



ANNEXURE - 2**General Population of Gir Somnath District as per Census-2011.**

Sr	Name	House hold	Total Population	Male	Female	Literacy Rate	Working Population	Non Worker
1	Talala	26193	135731	69833	65898	67.1	60390	75341
2	Patan-Veraval	56757	322492	164466	158026	65.2	114429	208063
3	Sutrapada	24327	141968	72091	69877	62.6	56355	85613
4	Kodinar	40094	228809	115684	113125	65.2	85823	142986
5/6	Una-Gir Gadhda	68953	388477	197952	190525	58.8	158539	229938
	Total	216324	1217477	620026	597451	63.1	475536	741941

ANNEXURE - 3**Vulnerable Population of Gir Somnath District (As Per Census-2011)**

Sr	Name	Population 0-6 Years	Above 65 - Old Age Persons	BPL Families	Handicap Persons	Blind Persons	Total SC	Total ST
1	Talala	15016	9558	8359	370	271	10451	7672
2	Patan-Veraval	39228	13756	4926	1137	338	26790	5798
3	Sutrapada	18121	6165	8172	924	210	14588	1042
4	Kodinar	28503	11177	6695	295	47	35346	1142
5/6	Una-Gir Gadhda	54075	14846	9728	70	20	26647	2107
	Total	154943	55502	37880	2796	886	113822	17761

ANNEXURE - 4**Area, Population Density, Inhabited, Uninhabited Villages of Gir Somnath District**

Sr.	Name of Taluka	Area in Sq. Km.	Population Density	Total Villages			City
				Inhabited	Uninhabited	Total	
1	Talala	951.60	134	68	31	99	1
2	Patan-Veraval	360.98	777	55	0	55	1
3	Sutrapada	326.72	375	47	0	47	1
4	Kodinar	536.80	369	63	0	63	1
5/6	Una/Gir Gadhda	1578.40	210	159	61	220	1
	Total	3754.50	373	392	92	484	5

ANNEXURE - 5**Bifurcation of Populated Villages as Population of Villages**

Sr.	Name of Taluka	Populated Villages	Villages Population						
			Less than 200	200 to 499	500 to 999	1000 to 1999	2000 to 4999	5000 to 9999	More than 10000
1	Talala	68	17	5	6	20	18	2	0
2	Patan-Veraval	55	0	0	6	25	21	3	0
3	Sutrapada	47	0	1	9	20	13	3	0
4	Kodinar	63	1	2	11	22	17	9	1
5/6	Una-Gir Gadhda	159	21	8	30	46	47	5	2
	Total	392	39	16	62	133	116	22	3

ANNEXURE - 6**Rain Fall Detail of Gir Somnath District 2007-2017 In MM**

Sr.	Taluka	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	Kodinar	2035	1197	1532	1588	880	450	1155	1250	720	1147	1423
2	Sutrapada	1360	960	1584	1399	1250	392	1066	949	407	806	1226
3	Talala	1925	1400	1183	2020	1184	593	1417	1073	563	1116	1101
4	Una	1506	1071	1042	1333	1008	387	1156	909	942	1079	780
5	Veraval	1705	1080	1855	1549	991	353	957	920	560	750	1098
6	Gir-Gadhada	-	-	-	-	-	-	-	833	806	1075	844

Rain Fall Detail-2018 In MM till**Date:31/10/2018**

Sr.	Taluka	Year-2018
1	Kodinar	1600
2	Sutrapada	1187
3	Talala	1116
4	Una	1340
5	Veraval	982
6	Gir-Gadhada	1404

ANNEXURE - 7**Detail of Coastal Villages**

Sr	Taluka	Coastal Village	Name of Costal Villages	Popu lation	Fishing Work	Salt Pan Work
1	Una	17	Manekpur, Saiyad Rajpara, Simar, Kheda, Senjaliya, Rajput Rajpara, Nava Bandar, Nandan, Naliya Mandavi, Kob, Vanzara, Olvan, Tad, Paldi, Chikhali.	54543	32868	410
2	Kodinar	08	Velan, Kaj, Sarakhadi, Chhara, Panadar, Chauhan ni Khan, Muldwarka	37049	3009	-
3	Sutrapda	07	Kanjotar, Dhamlej, Prasnavada, Kadvar, Vadodara (Zala), Sutrapada, Lati	52828	2147	-
4	Veraval	08	Kajali, Bhalpara, Patan, Veraval, Dari, Navapara, Adri, Vadodara Dodiya,	186641	29749	-
Total				331061	67773	410

--: જીલ્લામાં ઉપલબ્ધ આરોગ્ય સંલગ્ન સેવાભાવી સંસ્થાઓની યાદી :-			
ક્રમ	તાલુકા	નામ અને એડ્રેસ	ટેલીફોન
	વેરાવળ	જનસમાજ સેવા સંઘ, વ્યાયમશાળા, વેરાવળ.	૨૨૩૪૫૬
		વોલન્ટરી બ્લડ બેંક, એસ.ટી.રોડ, વેરાવળ	૨૨૩૪૫૬
		પ્રવિણ ક્લિનિક લેબોરેટરી, એસ.ટી.રોડ, વેરાવળ	૨૪૧૪૬૫
		લાયન્સ ક્લબ, સટા બજાર, વેરાવળ.	૨૨૧૭૧૮
		રોટરી ક્લબ, આર.એસ. પાન્ડે, સુત્રાપાડા.	૨૮૩૪૦૧
		જુનીયર એમ્બર્સ, આરતી ગીફ્ટ, નમે. મંદીર પાસે, વેરાવળ.	૨૪૪૪૦૪
		જનીવા ટ્રસ્ટ, ઈન્ડી. રેયોન કં., વેરાવળ	૨૪૬૬૮૧
		લોકહીત ચેરી. ટ્રસ્ટ, સોમનાથ ટોકીઝ સામે, તાલાલા રોડ, વેરાવળ.	૨૨૧૧૮૬
		ભારત વિકાસ પરિષદ, શ્યામ ટ્રાન્સપોર્ટ, રેયોન, વેરાવળ.	૨૨૨૦૨૫
		માનવ વિકાસ સેવા સંસ્થા, મેવાડા બ્રધર્સ, ચારબચોક, વેરાવળ	૨૨૨૨૩૭
	ઉના	જાયન્ટ ગ્રુપ, વિદ્યાર્થી બુક સ્ટોર, એમ.જી. રોડ, ઉના	૨૨૨૪૭૮
		બચતુલમાલકમીટી, મહેસા બીલડીંગ, ઉના	
		જનસેવા સમાજ ટ્રસ્ટ, જલારામ કોમ. સેન્ટર, આંબેડકર ચોક, ઉના.	૨૨૩૬૩૦
		યંગસ્ટાર સોશયલ ગ્રુપ, જીરસીરાપુરા રોડ, ઉના	૨૨૨૩૩૩

ANNEXURE – 8**Health Info-Gir Somnath District**

<i>Information</i>	<i>Numbers</i>
<i>Taluka</i>	<i>06</i>
<i>Primary Health Centre (PHC)</i>	<i>27</i>
<i>Allopathic Dispensary</i>	<i>00</i>
<i>Mobile Comprehensive Health Care Unit</i>	<i>02</i>
<i>Mobile Dispensary</i>	<i>00</i>
<i>Mobile Health Unit (Sagar Khedu) Sutrapada</i>	<i>01 (EMRI 108)</i>
<i>Mobile Medical Unit – Kodinar</i>	<i>01 (EMRI 108)</i>
<i>Community Health Centre (CHC)</i>	<i>08</i>
<i>Sub District Hospital</i>	<i>01</i>
<i>District Hospital</i>	<i>00</i>
<i>Grant in Aid Hospital</i>	<i>02</i> <i>R.N.Vala Hospial Kodinar Mehta Hospital Una</i>
<i>Villages</i>	<i>386 (5City Areas)</i>
<i>Sub Centre</i>	<i>173</i>

(A) Taluka wise Detail of C.H.C., P.H.C. and Sub centres of district.

Sr	Taluka	Name of C.H.C.	Name of P.H.C.	Name of Sub Centres
1	Veraval	Prabhas Patan	1.Govindpara	Umralla, Govindpara, Savni, Inaj, Dabhor, Bhalpara-1, Bhalpara-2, Bhalpara-3, Patanvadi, Deda
		Sub District Hospital	2.Adri	Adri-1, Adri-2, Vadodra Dodiya, dari, Chatroda, Vavdi, sidokar, simar
			3.Ajotha	Ajotha, Bij, Kajli, Navdra
			4.Pandva	Pandva, Indroi, Rampara, Khandheri
2	Sutrapada	Sutrapada	1.Thareli	Amrapur, Gorkhmadhi, Umbri, Lati, Lodhva-1, Lodhva-2, solaj
			2.Dhamlej	Dhamlej, Dhamlej Bandar, Rakhej, Singar
			3.Prasali	Prashli, Moradiya, Rangpur, Ghantiya,

Sr	Taluka	Name of C.H.C.	Name of P.H.C.	Name of Sub Centres
				Mahobatpara.
3	Talala	Talala	1.Dhava	Talala-1, Talala-2, Talala-3, Gundaran, Ambalash, Ghunsiya, Maljinjava, Semarvav, Chitravad, Dhanej, Borvav, Chitrod
			2.Ankolvadi	Ankolvadi, Surava, Madhavpur, Bhimdeval, Rasulpara, Javantri, Vadala. Pikhori, Hadmatiya, Moruka,
4	Una	1.CHC Una	1.Samter	Samter, Kandhi, Garal, Umej, Gaeaj, Nakej, Amodra, Kansari, Bhacha, Bhadiyadar,
			2.Sanakhada	sankhda, Gangada, Untavada, Khatrivada, Nana Samdhiyala, Moti Moli, Nariyeli Moli, dadiya,
			3.Navabandar	Navabandar-1, Navabandar-2, Navabandar-3, kalpan, Khajudra, Anjar, Vasoji, Allwan, Dandi
			4.Delvada	Delvada-1, Delvada-2, Delvada-3, Moth, Dudhada, Simar, Saidrajpara-1, Saidrajpara-2, Vasigpur, Khapad
			5.Tad	Tad, Kob, Kajaradi, Paladi, Simasi,Dhebha, siloj, alampur, Nathad, Kesariya, Chikhli
5	Gir Gadhada	Gir Gadhada	1.Jamvala	Jamvada, Thoradi, Jaragali,
			2.Fulaka	Sanvav, kanekiya, Fulka, Kareni, Sonpara
			3.Dhokadava	Dhokadava-1, Dhokadava-2, Mitli, Junaugla, Tulsishyam
			4.Fatsar	Fatsar, Khilawad, Vadgiyara, Kodiya
			5.Harmadiya	Harmadiya, Pichhavi, Gir Gadhada-1, Gir Gadhada-2
6	Kodinar	Kodinar	1. Dolasa	Dolasa, Adavi, Moti Fagani, Nanavada, Deval, Kodinar-1, Kodinar-2, Kodinar-3, Kodinar-4,
			2.Velan	Velan -1, Velan-2, Madhvad, Kaj, Sarakhadi, Kandodar,
			3.Ghantvad	Ghantvad, Sindhaj, Arnej, Valadar, Devalpur, Nagadala.
			4.Panadar	Panadhar, Gohilni khan, Muldwarka, Chara, Pedhwada, Ronaj
			5. Vithalpur	Mitiyaji, Vithalpur, Vadnagar, Alidar, Chara, Sedhaya

(B) Detail of Civil Hospitals & Mobile Dispensaries of District:

Sr. No	Location :
1.	Civil Hospital, Veraval [02876 – 243077, 244298]

2.	Mobile Comprehensive Health care unit, Tulsishyam, Ta- Una. – 9898575286
3.	Mobile Comprehensive Health care unit, Velan, Ta- Kodinar. – 9879877122

ANNEXURE - 9**(A) Details of Ambulance services available in District (Taluka Wise) :**

Sr.	Taluka	Name of Office	No. of Ambulance	Contact No.
1	Veraval	Veraval Hospital	1	243077
		C.H.C. Patan	1	239852
		Veraval Municipality	2	220101/220/290
		Red Cross Hospital, Veraval	1	223456
2	Una	C.H.C. Una	1	222044
		Municipality Una	1	222220
		Maheta Hospital Bhavnagar Road, Una	1	221482
3	Gir Gadhada	C.H.C. Gir Gadhada	1	243737
4	Talala	C.H.C. Talala	1	222502
		Sugar Factory Talala	1	222412
5	Kodinar	C.H.C. KODINAR	1	02795-221529
		Ramashibhai Narshibhai Vala Hospital	1	222841/891
		Municipality Kodinar	1	223446/411
6	Sutrapada	C.H.C. Sutrapada	1	263360
		G.H.C.L. Sutrapada	1	263401

(B) Details of EMRI-108 Ambulance services available in District (Taluka Wise) :

Sr	Segment Name	Address / Location.
1	Veraval	Jilla Panchayat Guest House, Nr. Railway Station, Veraval.
2	Kodinar	R.N. Vala Trust Hospital, Veraval Road, Kodinar.
3	Dolasa	PHC Campus, Dolasa, Ta. Kodinar. GJ-18-G-3582.
4	Una	Jilla Panchayat Guest House, Tower Chowk Una.
5	Gir Gadhda	Reliance Petrol Pump, Gir Gadhda. Ta. Una. GJ-18-G-3639.
6	Simar	Nr. Gram Panchayat, Simar, Ta. Una.
7	Talala	Jilla Panchayat Quarter, Tower Chowk, Sasan Road, Talala.
8	Sutrapada	Shiv Sagar Primary School, Beside Taluka Panchayat, Kodinar Road, Sutrapada. GJ-18-G-3431.
9	Prachi	Jilla Panchayat Guest House, Kodinar-Veraval Road Prachi.

Comunity Health Centres (CHC) Contact Details.

Sr.	Taluka	CHC	Ph. No.
1	Kodinar	Kodinar	02795-221529
2	Sutrapada	Sutrapada	02876-263833
3	Talala	Talala	02877-222502

4	Gir-Gadhada	Gir-Gadhada	02875-243737
5	Una	Una	02875-222044
6	Veraval	Prabhash Patan	02876-231852
7	Veraval	Civil Hospital Veraval	02876-244298

CUG TELEPHONE NUMBER'S OF PRIMARY HELTH CENTRE OF GIR SOMNATH DISTRICT

TALUKA	SR.NO.	P.H.C.	CUG P.H.C. M.O. PHONE NO.
VERAVAL	1	GOVINDPARA	75678 84385
	2	ADRI	8238042857
	3	PANDAVA	75678 84392
	4	AJOTHA	75678 84383
	5	DARI	75678 84386
UNA	6	DELVADA	75678 84374
	7	NAVABANDAR	8238042853
	8	SAMTER	75678 85889
	9	TAD	75678 85883
	10	SANKHADA	75678 85884
GIR GADHADA	11	FULKA	75678 85885
	12	FATSAR	75678 85884
	13	DHOKDAVA	75678 85886
	14	HARMADIA	75678 85887
	15	JAMVALA	82380 99479
KODINAR	16	DOLASA	75678 85060
	17	GHANTVAD	75678 85062
	18	VELAN	75678 85059
	19	VITTHALPUR	75678 85116
	20	PANADAR	75678 85061
	21	SINDHAJ	7567884160
SUTRAPADA	22	THARELI	75678 84389
	23	DHAMLEJ	75678 84390
	24	PRASALI	75678 84387
	25	PRASANAVADA	7574885340
TALALA	26	DHAVA	7574885338
	27	AKOLVADI	75678 85533

SR.No	HEALTH INSTITUTE	TELEPHONE NO.
1	SDH HOS. VERAVAL	02876-243077
2	RA.NA. VALA HOS. KODINAR	02795 221609
3	COMMUNITY HEALTH CENTRE-TALALA	02877-222502
4	COMMUNITY HEALTH CENTRE-UNA	02875-222044
5	COMMUNITY HEALTH CENTRE-GIR GADHADA	02875- 243737
6	COMMUNITY HEALTH CENTRE-SIMAR	02875-282344
7	COMMUNITY HEALTH CENTRE-P.PATAN	02876- 231852
8	COMMUNITY HEALTH CENTRE-SUTRAPADA	02876 -263360
9	COMMUNITY HEALTH CENTRE-KODINAR	02795 -221529
10	COMMUNITY HEALTH CENTRE-DOLASA TAL- KODINAR	02795 283322

ANNEXURE – 10**Distance from Ocean and Mean Sea Level for Village Residential Areas**

Sr.	Details	No. Villages	Taluka Covered
1	Distance from Ocean < 2 K.M.	26	4
2	Mean Sea Level < 10 Meter	48	4
3	Distance from Ocean < 10 K.M.	143	4
4	Mean Sea Level < 30 Meter	143	4
5	Distance from Ocean < 30 K.M.	342	6
6	Mean Sea Level < 100 Meter	306	6
7	Distance from Ocean < 50 K.M.	345 (All)	6 (All)
8	Mean Sea Level < 200 Meter	345 (All)	6 (All)

ANNEXURE – 11**Resources Provided by Govt. at Various Levels.****(A) Rescue Kits / Ropes / Generators**

Sr.	Name of Taluka	Life Saving Jacket	Life Buoy	200 Feet Ropes	100 Feet Ropes	Generator
1	SDM- Veraval	-	-	-	-	1
2	Mamlatdar-Veraval	50	30	5	10	1
3	Mamlatdar-Sutrapada	20	-	2	4	1
4	Mamlatdar-Una	50	50	5	10	1
5	Mamlatdar-Kodinar	30	30	3	6	1
6	Mamlatdar-Talala	20	20	2	4	1
	Total	170	130	17	34	6

(B) Fire Fighter / Water Browsers / Boat / De-Watering Pump Details

Sr.	Name of Nagar Palika	Fire Fighter	Water Browsers	Boat	De Watering Pump	Portable Emergency Light	Fire Bullate
1	Veraval-Patan Nagar Palika	2	2	1	5	2	3
2	Una Nagar Palika	1	1	-	3	2	1
3	Kodinar Nagar Palika	2	1	-	-	2	1
4	Sutrapada Nagar Palika	-	-	-	-	2	-
5	Talala Nagar Palika	-	-	-	-	2	-
6	Collectorate-Gir Somnath	-	-	-	-	3	
	Total	5	4	1	8	13	05

ANNEXURE – 12**Rain Gauge Machines available each Taluka.**

Sr.	Name of Taluka	Type of Rain Gauge	Place / Office
1	Veraval	Simple Measure	Mamlatdar Office, Veraval.
2	Veraval	Automatic	Weather Station Office, Veraval.
3	Sutrapada	Simple Measure	Mamlatdar Office, Sutrapada.
4	Talala	Simple Measure	Mamlatdar Office, Talala.
5	Kodinar	Simple Measure	Mamlatdar Office, Kodinar.
6	Una	Simple Measure	Mamlatdar Office, Una.
7	Gir Gadhada	Simple Measure	Mamlatdar Office, Gir Gadhada.

ANNEXURE – 13**Details of Minor & Medium Irrigation DAMs with Villages Located Under Catchments and Down Stream Area...**

Sr	Taluka	Name of DAM / Scheme	Place of DAM	Type of DAM	Longitude	Latitude	Height of DAM (Mtr.)	Total Door	Flow Capacity (Cusecs)	Wire less	Catchments & Down Stream Area Villages
1	Una	Shingoda	Jamvala	Medium	71.12	20.79	18.80	6	3309.000	Yes	[Jamvada of Una], [Ghantwad, Kodinar, Muldwarka, Chhachhar, Dudana, Ronaj, Sugala, Nana Itchvad of Kodinar]
2	Una	Raval	Chikhalkuba	Medium	71.00	20.79	19.00	6	2760.000	Yes	Garala, Kanek, Barada, Manekpur, Motha, Samter, Chikhalkuba, Dhokadava, Jasadhar, Kandhi, Mahobatpara, Mota Samadhiyala, Padapadar, Patapur, Rameshwar, Sanyapur, Umej
3	Una	Machhundri	Kodiya	Medium	71.18	20.77	10.00	-	5506.000	Yes	Chachakvad, Navabandar, Rajpara, Rampara, Una, Delvada, Don, Fatsar, Gundla, Itvaya, Zankharvad, Zudvadali, Karapan, Kodiya, Men
4	Una	Khilavad	Khilavad	Small	70.88	20.76		-		No	Khilavad, Gundala
5	Una	Farera	Fareda	Small	71.07	20.73		-		No	Gir-Gadhada, Sanvan, Dhrabavad, Simasi, Kandiya, Leraka, Chikhali, Kaneri
6	Una	Rupen	Shana Vankiya	Small	71.30	21.01		-		No	Vankiya, Timbi, Sanaradi, Khatrivad
7	Kodinar	Pichhavi	Pichhavi	Small	70.85	20.87		-		No	Hadmatiya, Pichhavi, Pichhava
8	Talala	Hiran - 1	Sasan	Medium	70.6	21.18	12.96	-	1034.000	Yes	Galiyavad, Ramrechi, Sangodra, Talala, Bhalchhel, Kamleshwar, Nes, Ganduri nes, Borvav, Chitravad, Chitrod, Sasan, Virpur of Talala], Maliya, Veraval
9	Talala	Hiran – 2	Umrathi	Medium	70.45	20.99	8.84	7	3559.000	Yes	Umrethi, Maljinjva of Talala], [Navadra, Sonariya, Badalpara, Kajali, Mithapur, Prabhas patan, Mandor, Bherala, Ishwariya, Indroi, Savani of Veraval]

ANNEXURE - 14**Resources at Taluka Level based on SDRN.**

Item No. and Resource Name	Taluka Total					District Total
	Kodinar	Sutrapada	Talala	Una	Veraval	
101 # Gas Cutters	1	1			2	4
102 # Cold Cutters	1	1			2	4
103 # Bolt cutters	10	2			1	13
104 # Electric Drill	6	1			3	10
106 # Chipping Hammer	20				4	24
115 # Jack with 5 ton lift	5	2			1	8
117 # Sledge hammer					2	2
118 # Heavy Axe	2	1			2	5
120 # Chain tackle					2	2
122 # Smoke Blower and Exhauster	2	2			2	6
124 # Gloves-Rubber, Tested up to 25, 000 volt	20	5			5	30
131 # Slotted Screwdrivers					2	2
133 # Blankets			1	10		11
134 # Lifting tackle - 3 ton	2				2	4
135 # Chains - 6 feet (3 ton lift)	5	2			2	9
138 # Inflatable Light Tower	5	2			2	9
140 # Search light	2	2			2	6
141 # Electric Generator (10 kv)	5	3	1	2	6	17
142 # Trucks - Aerial Lift	6	1			2	9
143 # Bulldozers wheeled/chain	2	1			1	4
144 # Dumper	20	2		2	8	32
145 # Earth movers	1		6		1	8
146 # Cranes - Heavy Duty, Fork type	3	1			5	9
147 # Tipper - Heavy Duty	30					30
150 # S & R Teams for Collapsed Structures				6	20	26
155 # Lifebuoy	30		20	50	30	130
156 # Life Jackets	30	20	20	50	83	203
160 # Fibber boat (12 persons)	1				2	3
164 # Divers Teams					10	10
165 # Search and Rescue Teams for Flood				2	6	8
166 # Suit - fire entry	2				2	4
169 # Suit – NBC		2			2	4
171 # Breathing apparatus - self contained	2				2	4
172 # Breathing Apparatus – Compressor					2	2
173 # Pump - high pressure, portable	1					1
174 # Pump – floating				1		1
175 # Extension Ladder	5	2			2	9
176 # ABC Type	200	10			3	213
177 # CO2 Type	250				3	253
178 # Foam Type	250				4	254
179 # DCP Type	300				3	303
180 # Halons Type					3	3
181 # Fire Tender	2		2	1	2	7
182 # Foam Tender	1					1
190 # Fire Fighting Foam	500				20	520
191 # Dry Chemical Powder	500				50	550
193 # Oil Installation - fire fighting team	20					20

Item No. and Resource Name	Taluka Total					District Total
	Kodinar	Sutrapada	Talala	Una	Veraval	
194 # High Rise Buildings - fire fighting team	20					20
195 # Ports - fire fighting team	20					20
197 # Mines - fire fighting team	20					20
200 # Spine boards					5	5
201 # Stretcher normal	7	2	2	2	7	20
202 # Stretcher medical evacuation	1					1
203 # Incubators for adults	1			6		7
204 # Incubators for children	3					3
205 # First aid kits	7	1	1	10	6	25
208 # Portable oxygen cylinders	13				20	33
210 # Portable x-rays					1	1
213 # Portable suction unit	1			6	5	12
214 # Mechanical ventilators				2		2
219 # Mobile hospital	1					1
220 # Mobile medicalvan	3					3
221 # Water filter	3					3
222 # Water tank	5	1	1	1	1	9
223 # Reservoirs treatment tank			1	1		2
226 # Anti snake venom	10	10	10	18	29	77
228 # Halogen tablets					200	200
225 # Vaccines	300	200	100	300	300	1200
227 # Chlorine tablets	300	200	100	300	300	1200
229 # General physician	6	2	3		11	22
231 # Surgeon			1		11	12
232 # Anaesthetist			1			1
233 # Gynaecologist			1	1	7	9
234 # Radiologist			1		1	2
235 # Paramedics	2	5	2	8	18	35
236 # Lab technicians	2	1	2	5	2	12
237 # OT assistants	1			5	1	7
238 # Medical first responders	5	1	1	2	2	11
246 # Tarpaulin	2				2	4
247 # Plastic Sheet	5					5
248 # Polythene Sheet	2					2
249 # Corrugated Galvanized Iron sheet	2					2
252 # 4 wheel drive vehicle	11	2	2	2	8	25
253 # Matador						0
254 # Truck	6	3			2	11
256 # Mini Bus	2			1	2	5
257 # Bus	43				17	60
258 # Tractor	354	32		5	12	403
259 # Trailer		1	1		2	4
260 # Heavy Truck	10	1			1	12
261 # Light Ambulance Van	1	1	1	1	1	5
262 # Medium Ambulance Van	3			1	1	5
265 # Water Tanker - Medium capacity					1	1
266 # Water Tanker - Large capacity			1	1		2
267 # VHF Sets Static	2	1			2	5
268 # VHF Sets Mobile					4	4
271 # Walkie Talkie Sets	5				2	7

Item No. and Resource Name	Taluka Total					District Total
	Kodinar	Sutrapada	Talala	Una	Veraval	
274 # V-SAT					1	1
278 # GPS Hand Sets			1			1

285 # Air Sampler - battery operated	1					1
286 # NBC face mask	50					50
297 # Emergency response guide book	2	2	1	1	2	8
311 # PH meter	2					2
322 # Traffic cones	10	10			10	30
324 # Decontamination solution					3	3
G2.1 # Aurvedic Doctor	12	4				16
G2.3 # Veterinary Doctor	2		1			3
G2.4 # Health Worker/ ANM	5		13			18
G2.5 # Paramedical Staff (Other than ANM)	8					8
G2.6 # Trained Dian	10					10
G2.8 # E.N.T. Specialist	1					1
G2.14 # Livestock Inspector	1			1	2	4
J1.10 # Siren	1					1
J1.16 # Fax Machine	2	2	1	2	2	9
J1.1 # Telephone Exchange	1	1	1	1	1	5
J1.3 # Akashvani Station					1	1
J1.8 # No. of Cable Operators	1	1	1	1	1	5
J1.12 # Cyber Cafe	1			2	5	8
J1.13 # Internet Connection	5	3	2	5	7	22
K3.12 # Boat (Mechanized)					100	100
K3.13 # Boat (Non-mechanized)					200	200
O1.6 # Dewatering Pump		1			5	6
S.1 # Home Guards	20		20	50	50	140
S.3 # NCC			50	50	100	200
S.4 # NSS	50	50	50	50	50	250

* Data displayed are based on TDMP updated on SDRN.

Nos. Displayed in First Column of Item No. and Resource Name is Coding of SDRN.

**As per ARTO-Gir Somnath District List Of JCB,LOADER,CRAIN etc
TA.VERAVAL**

SR. NO	VEHICLE REG. NO.	TYPE OF VEHICLE	OWNER NAME AND ADDRESS	REMARKS
1	GJ11AD 0325	EME LOADER	MERAMANBHAI KISHORBHAI PAMPANIYA AT.AJOTHA TA.VEAVAL	
2	GJ11AD 0327	LOADER	KADARBHAI AHMADBHAI GHORDERA AT.DARI TA.VERAVAL	
3	GJ11AD 0013	LOADER	INDIAN REYON AT.UNIT OF ADITYA BIRLA NUVO LTD. TA.VERAVAL	
4	GJ11AD 1358	LODER	PITHABHAI SIDABHAI NAEHERAL AT.LAXMI NAGAR NR.SHREEPA SOC. AT.VERAVAL TA.VERAVAL	
5	GJ11AD 1367	MOBIL CRAIN	KANTILAL MEGHAGIBHAI PANIYANI 233 BHALKA PACHAD BOUL PARA TA.VERAVAL DIST. JUNAGADH	
6	GJ11AD 1411	MOBIL CRAIN	VINODBHAI JIVRAJBHAI PAJILAU BHALKA RD. AT.VERAVAL TA.VERAVAL	
7	GJ11AD 1496	LOADER	RAMJIBHAI HAMIRBHAI SOLANKI AT.AJOTHA TA.VERAVAL DIST.JUNAGADJ	
8	GJ11AD 2089	LOADER	RAMLALA AGORWALLA POOP. MANOJKUMAR AGORWALLA C-35 GUJ.SIDHI UNIT AT.SIDHIGRAU TA.VERAVAL	
9	GJ11AD 2235	LOADER	JAGMALBHAI DIDABHAI BARAD AT.DUDALA TA.VERAVAL	
10	GJ11AD 2246	LOADER	BALUBHAI RAJABHAI SOEELA KAPOO STREET AT. PRABHAT TA.VERAVAL DIST.JUNAGADH	
11	GJ11AD 2804	MOBILE CRAIN	GUJARAT SIDHEE CEMENT LTD. AT.SIDHIGRAM TA.VERAVAL	
12	GJ11AD 3329	MOBILE CRAIN	SHREE BHIDIYA KOLI SAYANKET CHHIMAR BOAT ASSOCIATION AT.BHIDIYA PLOT AT.VERAVAL	
13	GJ11AD 3331	MOBILE CRAIN	JITENDRABHAI MOHANLALA KUNDRA KHARA KAHO VISTAR MOHAN FISH MARKET AT.VERAVAL	
14	GJ11AD 4214	LOADER	RAMSIBHAI KARSHANBHAI RAM AT.CHHATRODA TA.VERAVAL	
15	GJ11AD 4223	LOADER	BHAGIRATH CONSTRALION 25-RANI CORNER NR.WOODLAND HOTAL AT.VERAVAL TA.VERAVAL	
16	GJ11AD 4239	LOADER	MERAMAN VIRABHAI VALA AT.VIRODAR TA.VERAVAL	
17	GJ32S 365	LOADER	WADI VISTAR AT- SIMAR TA-VERAVAL DT- GIR SOMNATH	

18	GJ32S 358	LOADER	SOLANKI NARANBHAI AT-AJOTHA TA- VERAVAL DT- GIR SOMNATH	
19	GJ32S 0271	LOADER	JADAV PRATAPBHAI AT-NAVADRA TA-SUTRAPADA DIST- GIR SOMNATH	
20	GJ14M 5437	LOADER	JOTAVA SANGABHAI AT-VIRODRA TA- VERAVAL DIST- GIR SOMNATH	

TA.KODINAR

SR. NO	VEHICLE REG. NO.	TYPE OF VEHICLE	OWNER NAME AND ADDRESS	REMARKS
1	GJ11AD 0161	JCB LOADER	SHRI PRADIP KADHUBHAI ZANKAT AT.PANADAR TA.KODINAR	
2	GJ11AD 1394	LOADER	BHIKHABHAI BHAGVANBHAI GHAE AT.VADNAGAER TA.KODINAR	
3	GJ11AD 1400	LOADER	MILANBHAI HAJABHAI MODHU AT.VADNAGAR TA. KODINAR	
4	GJ11AD 2696	LOADER	MUKESHBHAI MANSUKHABHAI MEHTA AT.VADNAGAR TA.KODINAR	
5	GJ11AD 3340	LOADER	GUNUOUTSINH BHAGAVANBHAI BARAD GEB SOCIETY VERAVAL ROAD TA.KODINAR	
6	GJ11AD 3341	MOBILE CRAIN	MUIN CHANDRA KANSORD SERI AT.KODINAR TA.KODINAR	
7	GJ11AD 4201	MOBILE CRAIN	AMBUJA CEMENT LTD. P.O. AMBUJA NAGAR TA.KODINAR	
8	GJ11AD 4202	MOBILE CRAIN	AMBUJA CEMENT LTD. P.O. AMBUJA NAGAR TA.KODINAR	
9	GJ11AD 4243	LOADER	MERUBHAI DHIRUBHAI PORUINOR AT.KUJ TA.KODINAR	
10	GJ11AD 4249	LOADER	RAJANI KESHARBHAI DAHIVA AT.DELDI TA.KODINAR	
11	GJ11AD 4252	LOADER	GUNVOUTSINH BHAGAVANBHAI BARAD AT.DELDI TA.KODINAR	
12	GJ11AD 9270	LOADER	VAJUBHAI MALABHAI MORI AT.DOLAJA TA. KODINAR	
13	GJ32S 0360	LOADER	VALA RANUBHAI AT- KALVASAN TA-KODINAR DIST- GIR SOMNATH	

14	GJ32S 0264	JCB LOADER	PRUTHAVI BUILDERS SUGAR FACATORIS ROAD AT- KODINAR DIST- GIR SOMNATH	
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TA.TALALA

SR. NO	VEHICLE REG. NO.	TYPE OF VEHICLE	OWNER NAME AND ADDRESS	REMARKS
1	GJ11AD 1327	LOADER	BHARATMUMAR MERAMANBHAI PANPANIYA AT.AMBLASH TA.TALALA	
2	GJ11AD 1369	LOADER	SOMATHBHAI MULJIBHAI KORANAIE AT.GURDIYA TA.TALALA	
3	GJ11AD 1873	LOADER	ARVINDBHAI RANABHAI JORID AT.GORDIYA GIR TA.TALALA	
4	GJ11AD 3704	LOADER	BHARTBHAI MESALBHAI KAMBALIYA AT.GHANSIYA TA.TALALA	
5	GJ11AD 4220	LOADER	NANDKISHOR BHALVANTSINH MORI AT.JAJADHAR GIR TA.TALALA	
6	GJ11AD 4252	LOADER	RAJUBHAI NARANBHAI CHANDERA AT.PIPALVA GIR TA.TALALA	
7	GJ32S 0156	JCB LODER	BARAD DEVSHIBHAI AT- GHUSHIYA GIR TA- TALALA DIST- GIR SOMNATH	
8	GJ32S 0296	JCB LODER	BARAD VIKRAMBHAI AT- GHUSHIYA TA- TALALA DIST- GIR SOMNATH	

TA.UNA

SR. NO	VEHICLE REG. NO.	TYPE OF VEHICLE	OWNER NAME AND ADDRESS	REMARKS
1	GJ11AD 0761	JCB LOADER	HEMANTBHAI DADUBHAI DER AMBAJI NAGAR AT.UNA TA.UNA	
2	GJ11AD 1439	LOADER	HARASHADBHAI RAMJIBHAI BAMBHANIYA AT.UNA	
3	GJ11AD 1440	LOADER	JOYANTIBHAI SORAMANBHAI BABHANIYA AT.DOMAYA TA.UNA	
4	GJ11AD 1494	LOADER	KETAN KUMAR DEVASUKAR JOSHI AT.SONIVAV TA.UNA	
5	GJ11AD 1495	LOADER	RINDBLOCH INTIYAZ MUJABHAI AT.SONIVAV TA.UNA	
6	GJ11AD 1655	LOADER	GANESH EARTH MOUERS MAHENDRABHAI BHATT SHREEJI NAGAR AT.UNA TA.UNA	
7	GJ11AD 1809	LOADER	PRASHANT KUMAR RAMBHAI TARKHALA VICAS TA.UNA	

8	GJ11AD 1809	LOADER	MAHENDRABHAI BHATT AT.SHREEJI NAGAR TA.UNA	
9	GJ11AD 2047	LOADER	PRATAPBHAI DADUBHAI MODI AT.AMODRA TA.UNA	
10	GJ11AD 4108	LOADER	JADAVBHAI AMBABHAI GADHIYA AT KONAKIYA TA.UNA	
11	GJ32S 0357	JCB LOADER	MORI PRATAPBHAI AT- AMODRA TA- UNA DIST- GIR SOMNATH	
12	GJ11AD 1439	LOADER	HARASHADBHAI RAMJIBHAI BAMBHANIYA AT.UNA	
13	GJ32 S 0269	JCB LOADER	KACHHAL MANGAL AT- MOHABAT PARA TA- UNA DIST- GIR SOMNATH	
14	GJ32 S 0153	JCB LOADER	KHOKHAR SHAILESHBHAI AT- FATSAR TA- UNA DT- GIR SOMNATH	
15	GJ32 S 0294	JCB LOADER	MANJRIYA KANUBHAI SURYAKRUPA PANCHAVATI NILKAMAL CHOWK, AT-UNA DIST-GIR SOMNATH	
16	GJ32 S 0273	JCB LOADER	DANGODARA VIJAYBHAI AT- KANSARI TA- UNA DT-GIR SOMNATH	
17	GJ32 S 0295	JCB LOADER	SOLANKI DHIRUBHAI NAVAPARA VISTAR AT-GIR GADHADA DIST- GIR SOMNATH	

TA.UNA				
SR. NO	VEHICLE REG. NO.	TYPE OF VEHICLE	OWNER NAME AND ADDRESS	REMARKS
1	GJ32S 7843	JCB LOADER	VAJA SAMATBHAI UPLAPADA PRIMARY SCHOOL ROAD AT- SUTRAPADA DT- GIR SOMNATH	
2	GJ32S 0099	LOADER	ZALA RAYSINHBHAI AT- SUTRAPADA TA-SUTRAPADA DIST- GIR SOMNATH	
3	GJ32S 0154	LOADER	GOHIL BHARATBHAI AT-PRANSALI TA- SUTRAPADA DIST- GIR SOMNATH	
4	GJ32S 0359	LOADER	BARAD VIJAYBHAI AT-AMARAPUR TA- SUTARAPADA DIST- GIR SOMNATH	

ANNEXURE - 15**Latitude - Longitude of Taluka Hq. and City Places.**

Sr.	Name of Taluka	North Latitude	East Longitude	Distance from District HQ. in (Km.)	Distance On Air from Ocen in (Km.)
1	Veraval (M)	20.91	70.37	0	2
2	Patan (Somnath)	20.89	70.40	4	1
3	Talala (M)	21.05	70.52	26	23
4	Sutrapada (M)	20.84	70.48	15	2
5	Kodinar (M)	20.79	70.70	42	5.5
6	Una (M)	20.81	71.04	84	10
7	Gir Gadhada	20.92	70.91	78	23
8	Sasan GIR	21.17	70.59	41	36

ANNEXURE - 16**List of Chemicals and their Antidotes**

Sr.	Chemicals	Antidotes
1	Acid & Sulphur Oxide	Sodium Hydro- Carbonate (4% Conc.) Milk, Lime Juice, Milk of Magnesia.
2	Ammonia	Skin: Wash with Lactic Acid, Apply soframycin. Eye: Benoxynate Novacin-0.4% Conc. Throat : Smelling Ethanol or Ether
3	Benzene, Zylene, Toluen	Wash the skin area plenty of water if affected. Fresh air / Oxygen, 0.1 mg/kg slowly through injection rest in bed. Don't apply Epinefrin, Ifridin etc. Don't apply milk, vegetable oil or alcohol.
4	Bleaching Solution	Milk, Ice cream, eggs, milk of magnesia, aluminium hydroxide gel. Do not give acid antidotes.
5	Boric acid and boron derivatives	Epicake solution and activated charcoal. If vomited give 5% dextrose through injection.
6	Bromates or Cosmetics	Sodium thio sulphate 1ml/ kg 10% solution through injection.
7	Cadmium	Calcium dysodium editate through injection.
8	Carbon monoxide	Pure oxygen through mask. 20% mennytol (1gm/ kg) prednisolon 1 mg/kg through injection.
9	Cyanides and thio cynates insecticides	Methelene blue or kelocynere injection. If go through respiration smelling amale nitrite (3% solution) and sodium thio sulphate (25% solution) through injection.
10	DDT (Helogenated Insecticides)	Epicake syrup, Activated charcoal, saline cathartic diazepam (10 mg slowly through injection, wash the skin through water and soap). Give pure oxygen if problem in respiration.
11	Di- chloro methane	Hydrocortisone (200mg at every 4 hrs.) Aspirin and if pneumonia gives antibiotics.
12	Ethanol	2 gm sodium bi carbonate in 250ml water. Diazepam 10mg

Sr.	Chemicals	Antidotes
		<i>through injection. I injury in eye or skin wash plenty of water.</i>
13	<i>Heavy metal compounds</i>	<i>Activated carbon.</i>
14	<i>Hydrogen sulphide, others sulphides and Marcaptans.</i>	<i>Put the patients at clean air or pure oxygen. Smelling the drops or Ether or Ethanol. Amyl nitrite or Sodium Nitrite, pyridoxine 25mg/ kg or 10% Urea 1 gm/ kg through injection.</i>
15	<i>Iodine & its compounds</i>	<i>Milk, epinefin, 1% sodium thio sulphate solution 100ml by oral.</i>
16	<i>Irons salts</i>	<i>Concentrative dyferoxemine therapy.</i>
17	<i>Magnesium Salts</i>	<i>Calcium gluconate 10% solution 1ml/kg through injection.</i>
18	<i>Manganese</i>	<i>Calcium editate</i>
19	<i>Naphthalene</i>	<i>Keep the urinal Alkaline by giving the Sodium bicarbonate at evey four hour. Furosemide 1 ml/ kg in liquid.</i>
20	<i>Nitrogen Oxide</i>	<i>Prednision or prednisolon 5 mg at every 6 hours.</i>
21	<i>Phosphours, Phosgene and phophide</i>	<i>Calcium gluconate 10% of 10 ml through injection, 5% glucose in water, travesty (10% invert sugar) through injection.</i>
22	<i>Potassium permanganate</i>	<i>Hot milk, methelene blue (1% solution), ascorbic acid (5% solution)</i>
23	<i>Silica and asbestoses dust</i>	<i>Dust level should be minimize, use airline respirator, dust collector and local ventilation.</i>
24	<i>Tobacco and Nicotine</i>	<i>Do vomiting, Etropin (full dose), if problem in respiration give pure oxygen.</i>

➤ **Media Management Plan for**

1. Preparedness
<p>External</p> <ul style="list-style-type: none"> • Broadcast programs to raise people's awareness of disaster prevention measures • Develop news sources in emergency situation • Liaison with community leaders • Publicize station frequency • Broadcast public planning meetings • Outreach to the elderly, women, children, mentally and physically disabled people, as well as other marginalized and other vulnerable groups • Encourage stockpiling of (hand –powered) radio receivers • Compile local knowledge on signs of impending disaster and share it with community <p>Internal</p> <ul style="list-style-type: none"> • Back up important documents and files (including audio content) and store in a safe location • If possible, place a set of minimum broadcast equipment such as a microphone, tape/CD player, transmitter and antennae in a safe location • Plan radio programs to raise people's awareness of disaster prevention • First aid training for station personnel • Technical preparedness (generator, APS, securing, transmitter) • Guidelines for managing staff and volunteers • Arrange emergency drills in the station • Develop a contact list and post in station • Map community (ethnicity, religion, race, culture, vulnerability) • Prepare pre-recorded Emergency Response • Announcements and scripts and post in the studio
2. Mitigation
<ul style="list-style-type: none"> • Develop networks with local Disaster Management and Response (DMR) NGOs, local government and key stakeholders: hold regular meeting with them • Arrange emergency drills in the community • Training of on-air personnel - what and how to broadcast
3. Response
<p>External-on air</p> <ul style="list-style-type: none"> • Broadcast pre-prepared announcements • Broadcast emergency public meetings • Broadcast emergency evacuation announcements • All announcements broadcast in a reassuring and calm manner • Dispel myths and rumours and provide timely and accurate updates

- *Broadcast updates on damage situation*
- *Produce programs in which victims can express themselves*
- *Establish contact with the meteorological office and*
- *broadcast weather information*

Internal-behind the scenes

- *Ensure safety of all station personnel*
- *Call station briefing meeting*
- *Notify CR networks of status*
- *Monitor all official announcements and activities of*
- *national government, local government and aid*
- *agencies(NGOs)*
- *Enact station evacuation plan if needed*
- *Log all communications for reference*
- *Stay calm*
- *Divide information work so that all voices of the community can be heard and not just male leaders.*

4. Relief

- *Establish Information Support Centre for information sharing and logistic distribution*

5. Rehabilitation

External – Networking and Support

- *Broadcast pre-prepared announcements*
- *Broadcast programs to heal victim's psychology trauma.*
- *Interview trauma counsellors, monks, Imams and priests*
- *Broadcast recovery announcements*
- *Cooperate with DMR NGOs, local government and key stakeholders*
- *Broadcast recovery public meetings*
- *Provide call in or talk-back programs for people to people interactions*
- *Broadcast positive entertainment programming*

Internal – Evaluation and Review

- *Decentralize and copy important documents*
- *Call meeting of all personnel to debrief*
- *Monitor all official announcements and activities of national*
- *government, local government and aid agencies(NGOs)*
- *Evaluate response and update guidelines*
- *Check physical infrastructure and repair damage*
- *Log all communications for reference*
- *Update preparedness and response manuals as required*

Telephone Numbers for Disaster Information

1.	State Control Room	079-1070
2.	District Control Room	District STD Code + 1077

Relief and Rehabilitation Norms (Standards)

Office Memorandum

No. 32-3/2010-NDM-1
Government of India
Ministry of Home Affairs
(Disaster Management Division)

Most immediate
23/8/12

B* Wing, 3rd floor, NDCC/JI, New Delhi
Dated the 3rd August, 2012.

Office Memorandum

Subject: Inclusion of cold wave / frost as an eligible natural calamity in the guidelines for relief assistance under the SDRF/ NDRF- regarding.

The undersigned is directed to refer this Ministry's OM of even number dated 28th September 2010 regarding guidelines on constitution and administration of the State Disaster Response Fund (SDRF) and National Disaster Response Fund (NDRF). The Government of India has approved the inclusion of cold wave/ frost in the list of eligible calamity for assistance from SDRF and NDRF.

2. As such in addition to the natural calamities listed in the Para 3 and Para 3.1 of the Guidelines of SDRF/ NDRF respectively, the cold-wave/ frost may also be added to the list of eligible calamities for financial assistance from SDRF/ NDRF.


3. However, following condition/ criteria stipulated as under will be taken into account while considering the assistance from SDRF/ NDRF for the calamity of cold wave / frost:-

- a) Severe cold wave conditions would be said to prevail in an area :
 - (i) If minimum temperature is lower than 2^o C in an area where normal minimum temperature is 10^o C or above; and
 - (ii) If minimum temperature is lower than 5^o C in an area where normal minimum temperature is less than 10^o C.
- b) Frost conditions would be said to prevail when temperature falls below 0^o C in an area where it is an abnormal phenomenon during the kharif/ rabi season.
- c) For declaring a district affected by frost/ cold wave conditions by the State Government concerned, the meteorological data on departure of normal minimum temperature in the affected area, as released by the India Meteorological Department (IMD) shall be taken into consideration, for prevalence of frost/ cold wave conditions.
- d) Areas which suffer crop loss of 50% or more by cold wave/frost conditions will be eligible for assistance from SDRF/ NDRF, as is now allowed in the case of damage due to drought, hailstorm, pest attack and other natural calamities. Similarly, animal husbandry, including poultry sector, would get assistance from SDRF/ NDRF in the wake of cold wave/frost.

1/2

- e) The composition of the Central Team will be same as the Central Team constituted for the purpose of drought/hailstorm. The Central Team would make a field visit for assessment of damage to agriculture and horticulture production due to cold wave/ frost and shall take into consideration of all concomitant factors such as crops cutting experiment, fall in normal production. Normalized Differential Vegetation Index (NDVI) status of crops in the affected area, crops sown in the area affected, the vulnerability of the cold wave/ frost on standing agriculture/ horticulture crops etc. in the guidelines. The Ministry of Agriculture will be the nodal Ministry for natural calamity of cold wave/ frost.

4. This order will come into force prospectively with immediate effect.


(Dev Kumar)
Director (DM-1)
Telefax: 234328123

Distribution:-

1. Ministry of Finance, Department of Expenditure, North Block, New Delhi.
2. Ministry of Agriculture, Department of Agriculture & Cooperation, Krishi Bhavan, New Delhi.
3. National Disaster Management Authority, New Delhi.
4. Chief Secretaries of (All States).
5. The Relief Commissioners/ Secretaries, Department of Disaster Management of (All States).
6. Accountants General of all State Governments.
7. Controller General of Accounts (CGA), New Delhi.
8. Comptroller & Auditor General (CAG), New Delhi.
9. Resident Commissioners of all State Governments.

2/
2

Items and Norms of assistance From the State Disaster Response Fund (SDRF) and The National Disaster Response Fund (NDRF) for the period 2010-

2015

No. 32-3/2013-NDM-I
Government of India
Ministry of Home Affairs
(Disaster Management Division)

Wing, 3rd Floor, NDCC-II,
Jai Singh Road, New Delhi-110001,
Dated the 21st June 2013

To

1. Chief Secretaries of all States
2. The Relief Commissioners / Secretaries, Department of Disaster Management of all States

Subject: - Items and Norms of assistance from the State Disaster Response Fund (SDRF) and the National Disaster Response Fund (NDRF) for the period 2010 - 2015.

Sir/ Madam,

I am directed to refer to this Ministry's letter No. 32-3/ 2012-NDM-I, dated 28th September 2012 regarding forwarding the list of revised items and norms from assistance from SDRF/ NDRF in the wake of identified natural calamities.

2. It has now been decided to further revise the norms in respect of S. No. 9 (a) (i) i.e. repair/ restoration of fully damaged/ destroyed Pucca houses from Rs. 35,000/- per unit to Rs. 70,000/- per unit, of the revised list of items and norms of assistance from SDRF and NDRF. Similarly, it has also been decided to further revise the norms in respect of S. No. 1 (e) i.e. "provision of Gratuitous relief for families in dire need of immediate sustenance after a calamity; 8 (i) (B) (a) & (b) and 5 (ii) i.e. provision of input subsidy to SMF and OSMF (where crop loss is 50% and above) in respect of rainfed, irrigated and perennial crops; 6 (ii) & (iii) i.e. "provision of fodder/ feed concentrate and water supply in cattle camps". The State Governments concerned should draw up a separate plan with concerned Central Ministries and Planning Commission etc. for mitigating the drought situation. These revised norms, as cited above, will be effective from 1st March 2013.
3. The revised items and norms can also be downloaded from website of Disaster Management Division of Ministry of Home Affairs i.e. www.ndmindia.nic.in.
4. Accordingly, a copy of further modified/ revised items and norms of assistance from SDRF/ NDRF in the wake of identified natural calamities is **Annexed**.
5. This supersedes this Ministry's earlier letter on this subject, the last being No.32-3/ 2012-NDM-I dated the 28th September, 2012.

Yours faithfully,



(Goutam Ghosh)
Deputy Secretary to the Govt. of India
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Encl: As above.

Annexure -

REVISED LIST OF ITEMS AND NORMS OF ASSISTANCE FROM STATE DISASTER RESPONSE FUND (SDRF) AND NATIONAL DISASTER RESPONSE FUND (NDRF)

(Period 2010-15, MHA Letter No. 32-7/2011-NDM-I Dated 16th January 2012, modified vide letter No. 32-3/2012-NDM-I, dated 28th September 2012, modified vide letter No. 32-3/2013-NDM-I, dated 21st June 2013)

SNO.	ITEM	NORMS OF ASSISTANCE
1	2	3
1	GRATUITOUS RELIEF	
	a) Ex-Gratia payment to families of deceased persons.	<p>Rs. 1.50 lakh per deceased person including those involved in relief operations or associated in preparedness activities, subject to certification regarding cause of death from appropriate authority.</p> <ul style="list-style-type: none"> In the case of an Indian citizen who loses his life due to a notified natural calamity in a foreign country, his family would not be paid this relief. In the case of a Foreign citizen who loses his life due to a notified natural calamity within the territory of India, his family would also not be paid this relief.
	b) Ex-Gratia payment for loss of a limb or eye(s).	<p>Rs. 43,500/- per person, when the disability is between 40% and 80%.</p> <p>Rs. 62,000/- per person, when the disability is more than 80%.</p> <p>Subject to certification by a doctor from a hospital or dispensary of Government, regarding extent and cause of disability.</p>
	c) Grievous injury requiring hospitalization	<p>Rs. 9,300/- per person requiring hospitalization for more than a week.</p> <p>Rs. 3,100/- per person requiring hospitalization for less than a week.</p>
	d) Clothing and utensils/ house-hold goods, for families whose houses have been washed away/ fully damaged/severely inundated for more than a week due to a natural calamity.	<p>Rs. 1,300/- per family, for loss of clothing.</p> <p>Rs. 1,400/- per family, for loss of utensils/ household goods.</p>
	e) Gratuitous relief for families in dire need of immediate sustenance after a calamity.	<p>Rs. 40/- per adult and Rs. 30/- per child, not housed in relief camps. State Govt. will certify that (i) these persons have no food reserve, or their food reserves have been wiped out in the calamity, and (ii) identified beneficiaries are not housed in relief camps. Further State Government will provide the basis and process for arriving at such beneficiaries district-wise.</p> <p>GR to be provided to those who have no food reserves, or whose food reserves have been wiped out in a calamity, and who have no other immediate means of support.</p> <p>Period for providing gratuitous relief will be as per assessment of the State Executive Committee (SEC) and the Central Team (in case of NDRF). The default period of assistance will upto to 30 days, which may be extended upto 60 days in the first instance, if required, and subsequently upto 90 days in case of drought/ pest attack.</p>

2. SEARCH & RESCUE OPERATIONS	
(a) Cost of search and rescue measures/ evacuation of people affected/ likely to be affected	As per actual cost incurred, assessed by SEC and recommended by the Central Team (in case of NDRF). By the time the Central Team visits the affected area, these activities are already over. Therefore, the State Level Committee and the Central Team can recommend actual/ near-actual costs.
(b) Hiring of boats for carrying immediate relief and saving lives.	As per actual cost incurred, assessed by SEC and recommended by the Central Team (in case of NDRF). The quantum of assistance will be limited to the actual expenditure incurred on hiring boats and essential equipment required for rescuing stranded people and thereby saving human lives during a notified natural calamity.
3 RELIEF MEASURES	
a) Provision for temporary accommodation, food, clothing, medical care, etc. for people affected/ evacuated and sheltered in relief camps.	As per assessment of need by SEC and recommendation of the Central Team (in case of NDRF), for a period up to 30 days. The SEC would need to specify the number of camps, their duration and the number of persons in camps. In case of continuation of calamity like drought, or widespread devastation caused by earthquake or flood etc., this period may be extended to 60 days, and upto 90 days in cases of severe drought. Medical care may be provided from National Rural Health Mission (NRHM).
b) Air dropping of essential supplies	As per actual, based on assessment of need by SEC and recommendation of the Central Team (in case of NDRF). The quantum of assistance will be limited to actual amount raised in the bills by the Ministry of Defence for airdropping of essential supplies and rescue operations only.
c) Provision of emergency supply of drinking water in rural areas and urban areas	As per actual cost, based on assessment of need by SEC and recommended by the Central Team (in case of NDRF), up to 30 days and may be extended upto 90 days in case of drought.
4. CLEARANCE OF AFFECTED AREAS	
a) Clearance of debris in public areas.	As per actual cost within 30 days from the date of start of the work based on assessment of need by SEC for the assistance to be provided under SDRF and as per assessment of the Central team for assistance to be provided under NDRF.
b) Draining off flood water in affected areas	As per actual cost within 30 days from the date of start of the work based on assessment of need by SEC for the assistance to be provided under SDRF and as per assessment of the Central team (in case of NDRF).
c) Disposal of dead bodies/ Carcasses	As per actual, based on assessment of need by SEC and recommendation of the Central Team (in case of NDRF).
5 AGRICULTURE	
(i) Assistance to small and marginal farmers.	
A. Assistance for land and other loss	
a). De-silting of agricultural land (where thickness of sand/ silt deposit is more than 3", to be certified by the competent authority of the State Government.)	Rs. 8,100/- per hectare for each item.

b) Removal of debris on agricultural land in hilly areas	(Subject to the condition that no other assistance/ subsidy has been availed of by/ is eligible to the beneficiary under any other Government Scheme)
c) De-silting/ Restoration/ Repair of fish farms	
d) Loss of substantial portion of land caused by landslide, avalanche, change of course of rivers.	Rs. 25,000/- per hectare to only those small and marginal farmers whose ownership of the land is legitimate as per the revenue records.
B. Input subsidy (where crop loss is 50% and above)	
a) For agriculture crops, horticulture crops and annual plantation crops	Rs. 4,500/- per ha. in rainfed areas and restricted to sown areas. Rs. 9,000/- per ha. in assured irrigated areas, subject to minimum assistance not less than Rs.750 and restricted to sown areas.
b) Perennial crops	Rs. 12,000/- ha. for all types of perennial crops subject to minimum assistance not less than Rs. 1500/- and restricted to sown areas.
c) Sericulture	Rs. 3,200/- per ha. for Eri, Mulberry, Tussar Rs. 4,000/- per ha. for Muga.
(ii) Input subsidy to farmers other than small and marginal farmers	Rs. 4,500/- per hectare in rainfed areas and restricted to sown areas. Rs. 9,000/- per hectare for areas under assured irrigation and restricted to sown areas. Rs. 12,000/- per hectare for all types of perennial crops and restricted to sown areas. - Assistance may be provided where crop loss is 50% and above, subject to a ceiling of 1 ha. per farmer and upto 2 ha per farmer in case of successive calamities irrespective of the size of holding being large.
6. ANIMAL HUSBANDRY - ASSISTANCE TO SMALL AND MARGINAL FARMERS	
i) Replacement of milch animals, draught animals or animals used for haulage.	Milch animals - Rs.16,400/- Buffalo/ cow/ camel/ yak etc. Rs.1650/- Sheep/ Goat Draught animals - Rs.15000/- Camel/ horse/ bullock, etc. Rs.10,000/- Calf/ Donkey/ Pony/ Mule - The assistance may be restricted for the actual loss of economically productive animals and will be subject to a ceiling of 1 large milch animal or 4 small milch animals or 1 large draught animal or 2 small draught animals per household irrespective of whether a household has lost a larger number of animals. (The loss is to be certified by the Competent Authority designated by the State Government). Poultry:- Poultry @ 37/- per bird subject to a ceiling of assistance of Rs 400/- per beneficiary household. The death of the poultry birds should be on account of a natural calamity. Note:- Relief under these norms is not eligible if the assistance is available from any other Government Scheme, e.g. loss of birds due to Avian Influenza or any other diseases for which the Department of Animal Husbandry has a separate scheme for compensating the poultry owners.

ii) Provision of fodder / feed concentrate including water supply and medicines in cattle camps.	Large animals- Rs. 50/- per day. Small animals- Rs. 25/- per day. Period for providing relief will be as per assessment of the State Executive Committee (SEC) and the Central Team (in case of NDRF). The default period for assistance will be upto 30 days, which may be extended upto 60 days in the first instance and in case of severe drought up to 90 days. Based on assessment of need by SEC and recommendation of the Central Team, (in case of NDRF) consistent with estimates of cattle as per Livestock Census and subject to the certificate by the competent authority about the requirement of medicine and vaccine being calamity related.
iii) Transport of fodder to cattle outside cattle camps	As per actual cost of transport, based on assessment of need by SEC and recommendation of the Central Team (in case of NDRF) consistent with estimates of cattle as per Livestock Census.
7 FISHERY	
i) Assistance to Fisherman for repair / replacement of boats, nets – damaged or lost -- Boat -- Dugout-Canoe -- Catamaran -- net (This assistance will not be provided if the beneficiary is eligible or has availed of any subsidy/ assistance, for the instant calamity, under any other Government Scheme.)	Rs. 3,000/- for repair of partially damaged boats only Rs. 1,500/- for repair of partially damaged net Rs. 7,000/- for replacement of fully damaged boats Rs. 1,850/- for replacement of fully damaged net
ii) Input subsidy for fish seed farm	Rs. 6,000 per hectare. (This assistance will not be provided if the beneficiary is eligible or has availed of any subsidy/ assistance, for the instant calamity, under any other Government Scheme, except the one time subsidy provided under the Scheme of Department of Animal, Husbandry, Dairying and Fisheries, Ministry of Agriculture.)
8 HANDICRAFTS/HANDLOOM – ASSISTANCE TO ARTISANS	
i) For replacement of damaged tools/ equipment	Rs. 3,000 per artisan for equipments. - Subject to certification by the competent authority designated by the Government about damage and its replacement.
ii) For loss of raw material/ goods in process/ finished goods	Rs. 3,000 per artisan for raw material. - Subject to certification by Competent Authority designated by the State Government about loss and its replacement.
9 HOUSING	
a) Fully damaged/ destroyed houses	
i) Pucca house	Rs. 70,000/- per house
ii) Kutch House	Rs. 15,000/- per house
b) Severely damaged houses	
i) Pucca House	Rs. 6,300/- per house
ii) Kutch House	Rs. 3,200/- per house

(c) Partially Damaged Houses – both pucca/ kutcha (other than huts) where the damage is at least 15 %	Rs. 1,900/- per house
d) Damaged / destroyed huts:	Rs. 2,500/- per hut, <i>(Hut means temporary, make shift unit, inferior to Kutcha house, made of thatch, mud, plastic sheets etc. traditionally recognized as hut by the State/ District authorities.)</i> <i>Note: -The damaged house should be an authorized construction duly certified by the Competent Authority of the State Government.</i>
e) Cattle shed attached with house :	Rs.1,250/- per shed.
10 INFRASTRUCTURE	
<i>Repair/restoration (of immediate nature) of damaged infrastructure:</i> <i>(1) Roads & bridges (2) Drinking Water Supply Works, (3) Irrigation, (4) Power (only limited to immediate restoration of electricity supply in the affected areas), (5) Schools, (6) Primary Health Centres, (7) Community assets owned by Panchayat.</i> Sectors such as Telecommunication and Power (except immediate restoration of power supply), which generate their own revenues, and also undertake immediate repair/ restoration works from their own funds/ resources, are excluded.	<i>Activities of immediate nature :</i> Illustrative lists of activities which may be considered as works of an immediate nature are given in the enclosed Appendix . <i>Assessment of requirements :</i> Based on assessment of need, as per States' costs/ rates/ schedules for repair, by SEC and recommendation of the Central Team (in case of NDRF). - As regards repair of roads, due consideration shall be given to Norms for Maintenance of Roads in India, 2001, as amended from time to time, for repairs of roads affected by heavy rains/floods, cyclone, landslide, sand dunes, etc. to restore traffic. For reference these norms are <ul style="list-style-type: none"> • Normal and Urban areas: upto 15% of the total of Ordinary Repair (OR) and Periodical Repair (PR). • Hills: upto 20% of total of OR and PR. <i>Note: States shall first use its provision under the budget for regular maintenance and repair.</i>
11 PROCUREMENT	
Procurement of essential search, rescue and evacuation equipments including communication equipments, etc. for response to disaster.	- Expenditure is to be incurred from SDRF only (and not from NDRF), as assessed by the State Executive Committee (SEC). - The total expenditure on this item should not exceed 5% of the annual allocation of the SDRF.

Illustrative list of activities Identified as of an immediate Nature

Illustrative list of activities identified as of an immediate nature.**1. Drinking Water Supply :**

- i) Repair of damaged platforms of hand pumps/ring wells/ spring-tapped chambers/public stand posts, cisterns.
- ii) Restoration of damaged stand posts including replacement of damaged pipe lengths with new pipe lengths, cleaning of clear water reservoir (to make it leak proof).
- iii) Repair of damaged pumping machines, leaking overhead reservoirs and water pumps including damaged intake – structure, approach gantries/jetties.

2. Roads

- i) Filling up of breaches and potholes, use of pipe for creating waterways, repair and stone pitching of embankments.
- ii) Repair of breached culverts.
- iii) Providing diversions to the damaged/washed out portions of bridges to restore immediate connectivity.
- iv) Temporary repair of approaches to bridges/embankments of bridges., repair of damaged railing bridges, repair of causeways to restore immediate connectivity, granular sub base, over damaged stretch of roads to restore traffic.

3. Irrigation :

- i) Immediate repair of damaged canal structures and earthen/masonry works of tanks and small reservoirs with the use of cement, sand bags and stones.
- ii) Repair of weak areas such as piping or rat holes in dam walls/ embankments.
- iii) Removal of vegetative material/building material/debris from canal and drainage system.

4. Health :

Repair of damaged approach roads, buildings and electrical lines of PHCs/ community Health Centres.

5. Community assets of Panchayat

- a) Repair of village internal roads.
- b) Removal of debris from drainage/ sewerage lines.
- c) Repair of internal water supply lines.
- d) Repair of street lights.
- e) Temporary repair of primary schools, Panchayat ghars, community halls, *anganwadi*, etc.

➤ **Rehabilitation:**

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

➤ **Format (Reports, Damage and Loss Assessment):**

➤ **Standard damage assessment form:**

*Application form for Government help for to Repair / Rebuilt House/Huts
damaged during the Natural calamities of Earthquake on date 26.01.2001
:: **APPLICATION FORM** ::*

1. Name of Applicant
2. Name of Village & Location of House / Hut
3. a. Ward No. Block No. House No.
 b. Area
 c. Valuation Register No.
1. Total No. of Family Member of Applicant

Sr. No.	Name	Age	Relation
1			
2			
3			

2. Annual Income of Applicant family
3. (A) Ownership of House :
 House owner / House Tenant Name and Address :
4. House / Hut Party damage or fully damage
5. Damage estimate cost (In Rupees)

6. Amount Damaged for to Repair / Rebuilt House / Hut.

7. Fully damage House/ Hut is on official place or not ? If not then Rebuilt House / Hut is on official place ?

Place :

Signature of Applicant

Date :

Rojkam

Shriresident of Gir Somnath has residential building / Hut which is demolished heavy damage during the(type of Calamities). Which has seen by us and the estimated damage cost is Rs..... is true for that we punch sign under this .

- 1.
- 2
- 3

In presence of Team leader

Agreement

I shri living in village Taluka Agree to write agreement that in referce to my application what over the help given to me by Government according to his rules, I spend it for rebuilt house / hut. If I fail to do so I repaid the help to Government .

Witness :

Name :

Dates :

Applicant Signature

In presence of Ten leaders.

In accordance with the Application of Shri..... for to repair / rebuilt residential building / kacha / packa / Hut. I personally verified the damage. In accordance with damage of situation of applicant . I agree to give him help according to rule. His valuation register No. is

Date:

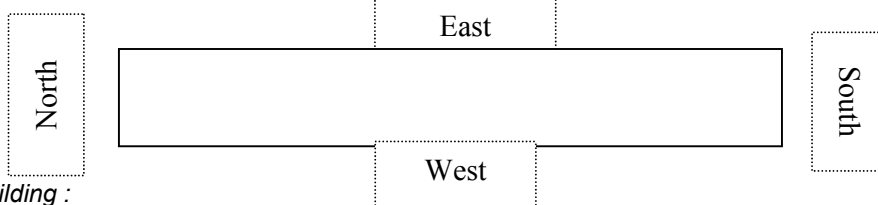
Team Leader : Signagture

Shri..... Residence..... house / hut
damage details

Ward No.....

House No.....

Type of House : Kacha / Packa / Hut



Height of building :

Plinth Area :

Walls :

Cellar :

Roof detail : Tiles / Slash

Approximate damage :

(Repairing cost)

Categon of Damage :

% damage :

Engineer's Sign / Officer's Sign

Name :

-----Looking to the
above detail Rs.is sranted as a help for to repair / rebuilt . House / Hut.

Date :

Mamlatdar

Place :

➤ **SOP-Roll of Each Department:**

1. Each Department and Govt. agency involved in Disaster Mgmt and Mitigation will :

- Designate a Nodal officer for emergency response and will act as the contact person for that department/agency.
- Ensure establishment of fail-safe two-way communication with the state, district and other emergency control rooms and within the organization.
- Emphasis on communication systems used regularly during LO with more focus on the use of VHF's with automatic repeaters, mobile phones with publicised numbers, HF radio sets etc. It should be remembered that SAT phones fail during prolonged emergencies and electric failure if the phones cannot be re-charged.
- Work under the overall supervision of the IC / the District Collectors during emergencies.

2. Agriculture

• Prevention Activities:

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

- **Preparedness Activities before disaster seasons**

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

- **Response Activities:**

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

- **Recovery Activities**

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

3. Health Department

3.1. Disaster Events

- **Prevention Activities:**

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

- **Preparedness Activities before Disaster Seasons**

- **For heat wave :**

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

- **Response activities:**

- *Stock piling of life-saving drugs, detoxicants, anesthesia, Halogen tablets in vulnerable areas.*
- *Strengthening of drug supply system with powers for local purchase during LO.*
- *Situational assessment and reviewing the status of response mechanisms in known*

vulnerable pockets.

- *Ensure adequate availability of personnel in disaster sites.*
- *Review and update precautionary measures and procedures, and apprise the personnel who will be implementing those.*
- **Sanitation**
- *Dispensing with post-mortem activities during L1, L2 and L3 when the relatives and/or the competent authority is satisfied about cause of death.*
- *Disinfections of water bodies and drinking water sources.*
- *Immunization against infectious diseases.*
- *Ensure continuous flow of information.*
- **Recovery Activities**
- *Continuation of disease surveillance and monitoring.*
- *Continuation of treatment, monitoring and other epidemic control activities till the situation is brought under control and the epidemic eradicated.*
- *Trauma counselling.*
- *Treatment and socio-medical rehabilitation of injured or disabled persons.*
- *Immunization and nutritional surveillance.*
- *Long term plans to progressively reduce various factors that contribute to high level of vulnerability to diseases of population affected by disasters.*

3.2 Epidemics

- **Preventive Activities:**
- *Supply of safe drinking water, water quality monitoring and improved sanitation.*
- *Vector Control programme as a part of overall community sanitation activities.*
- *Promotion of personal and community latrines.*
- *Sanitation of sewage and drainage systems.*
- *Development of proper solid waste management systems.*
- *Surveillance and spraying of water bodies for control of malaria.*
- *Promoting and strengthening Primary Health Centres with network of paraprofessionals to improve the capacity of surveillance and control of epidemics.*
- *Establishing testing laboratories at appropriate locations to reduce the time taken for early diagnosis and subsequent warning.*
- *Establishing procedures and methods of coordination with the Health Department, other local authorities/departments and NGOs to ensure that adequate prevention and preparedness measures have been taken to prevent and / or minimise the probable outbreak of epidemics.*
- *Identification of areas prone to certain epidemics and assessment of requirements to control and ultimately eradicate the epidemic.*

- *Identification of appropriate locations and setting up of site operation camps for combating epidemics.*
- *Listing and identification of vehicles to be requisitioned for transport of injured animals.*
- *Vaccination of the animals and identification of campsites in the probable areas.*
- *Promotion of animal insurance.*
- *Tagging of animals*
- *Arrangement of standby generators for veterinary hospitals.*
- *Provision in each hospital for receiving large number of livestock at a time.*
- *Training of community members in carcasses disposal.*
- ***Preparedness activities before disaster seasons***
- *Stock piling of water, fodder and animal feed.*
- *Pre-arrangements for tie-up with fodder supply units.*
- *Stock-piling of surgical packets.*
- *Construction of mounds for safe shelter of animals.*
- *Identification of various water sources to be used by animals in case of prolonged hot and dry spells.*
- *Training of volunteers & creation of local units for carcass disposal.*
- *Municipalities / Gram Panchayats to be given responsibility for removing animals likely to become health hazards.*
- ***Response Activities:***
- *Eradication and control of animal diseases, treatment of injured animals ~ Protection of abandoned and lost cattle.*
- *Supply of medicines and fodder to affected areas.*
- *Ensure adequate availability of personnel and mobile team.*
- *Disposal of carcasses ensuring proper sanitation to avoid outbreak of epidemics.*
- *Establishment of public information centre with a means of communication, to assist in providing an organised source of information.*
- *Mobilizing community participation for carcass disposal.*
- ***Recovery Activities:***
- *Assess losses of animals assets and needs of persons and communities.*
- *Play a facilitating role for early approval of soft loans for buying animals and ensuring insurance coverage and disaster proof housing or alternative shelters/ mounds for animals for future emergencies.*
- *Establishment of animal disease surveillance system.*

5. Water Supplies and Sanitation (GWSSB)

- **Prevention Activities:**

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

- **Preparedness Activities for disaster seasons**

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

- **Response Activities:**

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

- **Recovery Activities:**

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

6. Police:

- **Prevention Activities:**

- *Keep the force in general and the GSDRAF in particular fighting fit for search, rescue, evacuation and other emergency operations at all times through regular drills.*
- *Procurement and deployment of modern emergency equipments while modernising existing infrastructure and equipments for disaster response along with regular training and drills for effective handling of these equipments.*
- *Focus on better training and equipments for GSDRAF for all types of disasters, e.g. diving equipments.*

- *Rotation of members of GSDRAF so that the force remains fighting fit.*
- *Ensure that all communication equipments including wireless are regularly functioning and deployment of extra wireless units in vulnerable pockets.*
- *Ensure inter changeability of VHF communication sets of police and GSDMA supplied units, if required.*
- *Keeping close contact with the District Administration & Emergency Officer.*
- *Superintendent of Police be made Vice Chairperson of District Natural Calamity Committee.*
- *Involvement of the local army units in response planning activities and during the preparation of the annual contingency plans to ensure logistics and other support to armed forces during emergencies.*
- **Response Plan:**
- *Security arrangements for relief materials in transit and in camps etc.*
- *Senior police officers to be deployed in control rooms at State & district levels during L 1 level deployment onwards.*
- *Deploy personnel to guard vulnerable embankments and at other risk points.*
- *Arrangement for the safety.*
- *Coordinate search, rescue and evacuation operations in coordination with the administration*
- *Emergency traffic management.*
- *Maintenance of law and order in the affected areas.*
- *Assist administration in taking necessary action against hoarders, black marketers etc.*

7. Civil Defence

Prevention Activities

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

Response Activities

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

8. Fire Services:

- **Prevention Activities:**

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

- **Response Activities:**

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

9. Civil Supplies:

- **Preventive Activities**

- *Construction and maintenance of storage godowns at strategic locations.*
- *Stock piling of food and essential commodities in anticipation of disaster.*
- *Take appropriate preservative methods to ensure that food and other relief stock are not damaged during storage, especially precautions against moisture, rodents and fungus infestation.*

- **Response Activities**

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

- **Recovery Activities**

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

10. Works/ Rural Development Departments

- **Prevention Activities :**

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

- **Response Activities**

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

- **Recovery Activities:**

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

11. Energy:

- **Prevention Activities:**

- Identification of materials/tool kits required for emergency response.
- Ensure and educate the minimum safety standards to be adopted for electrical installation and equipments and organize training of electricians accordingly.
- Develop and administer regulations to ensure safety of electrical accessories and electrical installations.
- Train and have a contingency plan to ensure early electricity supply to essential services during emergencies and restoration of electric supply at an early date.
- Develop and administer code of practice for power line clearance to avoid electrocution due to broken / fallen wires.

- *Strengthen high-tension cable towers to withstand high wind speed, flooding and earthquake, modernize electric installation, strengthen electric distribution system to ensure minimum damages during natural calamities.*
- *Conduct public/industry awareness campaigns to prevent electric accidents during normal times and during and after a natural disaster.*

- **Response Activities:**

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

12. Water Resources Department:

- **Prevention Activities:**

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

- **Response Activities:**

- *Monitoring flood situation.*
- *Dissemination of flood warning.*
- *Ensure accurate dissemination of warning messages naming GPs & Taluka with details of flow & likely damage.*
- *Monitoring and protection of irrigation infrastructures.*
- *Inspection of bunds of dams, irrigation channels, bridges, culverts, control gates and overflow channels.*

- *Inspection and repair of pumps, generator, motor equipments, station buildings.*
- *Community mobilization in breach closure*
- **Recovery Activities:**
- *Strengthening of infrastructure and human resources.*
- *Review and documentation.*
- *Sharing of experiences and lessons learnt.*
- *Training of staff.*
- *Development of checklists and contingency plans.*

13. Fisheries

- **Prevention Activities**
- *Registration of boats and fishermen.*
- *Building community awareness on weather phenomena and warning system especially on Do's and Don'ts on receipt of weather related warnings.*
- *Assist in providing life saving items like life jackets, hand radios, etc.*
- *Certifying the usability of all boats and notifying their carrying capacities.*
- *Capacity building of traditional fishermen and improvisation of traditional boats which can be used during emergencies.*
- *Train up young fishermen in search & rescue operation and hire their services during emergency.*
- **Response Activities**
- *Ensure warning dissemination to fishing communities living in vulnerable pockets.*
- *Responsible for mobilising boats during emergencies and for payment of wages to boatmen hired during emergencies.*
- *Support in mobilization and additional deployment of boats during emergencies.*
- *Assess the losses of fisheries and aquaculture assets and the needs of persons and communities affected by emergency.*
- **Recovery Activities**
- *Provide compensations and advice to affected individuals, community.*
- *Plan for rehabilitation in the long run of the fisher folk including resettlement, insurance, better boats, nets, etc., improved communication system as a part of the communication hub for warning dissemination, especially for marine fishermen and fishing communities residing in high-risk areas.*

14. Forest Department

- **Prevention activities**
- *Promotion of shelter belt plantation.*

- *Publishing for public knowledge details of forest cover, use of land under the forest department, the rate of depletion and its causes.*
- *Keep saws (both power and manual) in working conditions.*
- *Provision of seedling to the community and encouraging plantation activities, promoting nurseries for providing seedlings in case of destruction of trees during natural disasters.*

15. Transport Department:

- **Prevention Activities**

- *Listing of vehicles which can be used for emergency operation.*
- *Safety accreditation, enforcement and compliance.*
- *Ensuring vehicles follow accepted safety standards.*
- *Build awareness on road safety and traffic rules through awareness campaign, use of different IEC strategies and training to school children.*
- *Ensure proper enforcement of safety regulations*
- *Response Activities.*
- *Requisition vehicles, trucks, and other means of transport to help in the emergency operations.*
- *Participate in post impact assessment of emergency situation.*
- *Support in search, rescue and first aid.*
- *Failure to cooperate and misappropriation of relief materials to invite disqualification from the post.*

- **Recovery Activities**

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

16. Panchayati Raj

- **Preventive Activities**

- *Develop prevention/mitigation strategies for risk reduction at community level.*
- *Training of elected representatives on various aspects of disaster management.*
- *Public awareness on various aspects of disaster management.*
- *Organise mock drills.*

- *Promote and support community-based disaster management plans.*
- *Support strengthening response mechanisms at the G.P. level (e.g., better communication, local storage, search & rescue equipments, etc.).*
- *Clean drainage channels, organise through community participation trimming of branches before cyclone season.*
- *Ensure alternative routes/means of communication for movement of relief materials and personnel to marooned areas or areas likely to be marooned.*
- *Assist all the government departments to plan and prioritise prevention and preparedness activities while ensuring active community participation.*
- **Response Activities**
- *Train up the G.P. Members and Support for timely and appropriate delivery of warning to the community.*
- *Clearance of blocked drains and roads, including tree removal in the villages.*
- *Construct alternative temporary roads to restore communication to the villages.*
- *PRIs to be a part of the damage survey and relief distribution teams to ensure popular participation.*
- *Operationalise emergency relief centres and emergency shelter.*
- *Sanitation, drinking water and medical aid arrangements.*
- *IEC activities for greater awareness regarding the role of trees and forests for protection during emergencies and also to minimise environmental impact which results owing to deforestation like climate change, soil erosion, etc.*
- *Increasing involvement of the community, NGOs and CBOs in plantation, protection and other forest protection, rejuvenation and restoration activities.*
- *Plan for reducing the incidence, and minimise the impact of forest fire.*
- **Response Activities :**
- *Assist in road clearance.*
- *Provision of tree cutting equipments.*
- *Units for tree cutting and disposal to be put under the control of GSDMA, SRC, Collector during L1.*
- *Provision of building materials such as bamboos etc for construction of shelters.*
- **Recovery Activities :**
- *Take up plantation to make good the damage caused to tree cover.*

17. Information & Public Relations Department

- **Prevention Activities**
- *Creation of public awareness regarding various types of disasters through media campaigns.*
- *Dissemination of information to public and others concerned regarding doís and*

donits of various disasters.

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

18. Revenue Department

- *Co-ordination with Govt. of Gujarat Secretariat and Officers of Govt. of India*
- *Overall control & supervision*
- *Damage assessment, finalization of reports and declaration of L1/L2 disasters*
- *Mobilization of finance*

• **19. Home Department**

- *Requisition, deployment and providing necessary logistic support to the armed forces.*
- *Provide maps for air dropping, etc.*

20. Gujarat Disaster Rapid Action Force

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

Indicators:**(A) Important Websites:**

Web Link	In Concern to
http://10.24.36.1/sdrnguj/ http://203.77.202.117/sdrnguj/	State Disaster Resource Inventory for Gujarat.
http://www.gsdma.org/	Gujarat State Disaster Management Authority.
http://collectorjunagadh.gujarat.gov.in/	Collectorate Junagadh.
http://junagadhdp.gujarat.gov.in/junagadh/index.htm	District Panchayat – JND.
http://www.spjunagadh.gujarat.gov.in/spjunagadh/default.aspx http://www.idrn.gov.in/	Police Department JND. India Disaster Resources.
http://www.imd.gov.in/section/satmet/dynamic/insatsector-irc.htm	Satellite Image.
http://www.imd.gov.in/section/nhac/distforecast/junagadh.htm	Weather Forecast.
http://imd.gov.in/section/seismo/dynamic/PRLMNEW1.HTM	Recent Earthquake India.
http://isr.gujarat.gov.in/Latest_EQ.html	Earthquakes in Gujarat.
http://ptwc.weather.gov/?region=3	Tsunami Warning.

(B) Sources of Information:

1. Departmental Disaster Management Plan of District level Agencies.
2. Flood Memorandum of Irrigation Branch, Junagadh.
3. Statistical outline of District Statistics Department, District Panchayat, Junagadh.
4. Incident Command System Training Materials.
5. Officer's Training Materials of Gujarat Institute of Disaster Management.
6. State / India Disaster Resource Network Inventory.
7. Weather Station, Agriculture University, Junagadh.
8. Various Emergency Operation Files of Collector Office, Junagadh and Gir-Somnath.
9. District Inspector of land records (DILR) and BISAG.
10. Off Site Emergency Plan of Industrial Safety and Health Department.
11. Village / City / Taluka Disaster Management Plans.
12. The Gujarat State Disaster Management Act, 2003.
13. Wikipedia website online contents through <http://en.wikipedia.org>
14. Deoc, Gir Somanth



Contact Directory



1. Gujarat State's District Level Emergency Contact Nos.

Sr.	District Name	Code No.	Collector			DDO		SP		RAC	DEOC
			Office	Fax	Mobile	Office	Mobile	Office	Mobile	Mobile	Office
1	Ahmedabad	079	27551681	27552144	9978406201	25506487	9978406226	26890440	9978406062	9978405173	27560511
2	Amreli	02792	222307	222710	9978406202	222313	9978406227	222333	9978405063	9978405203	230735
3	Anand	02692	262271	261575	9978406203	241110	9978406228	260027	9978405064	9978405175	243222
4	Banaskantha	02742	257171	252063	9978406204	254060	9978406229	257015	9978405065	9978405176	250627
5	Bharuch	02642	240600	240602	9978406205	240603	9978406230	223633	9978405066	9978405177	242300
6	Bhavnagar	0278	2428822	2427941	9978406206	2426810	9978406231	2520050	9978405067	9978405178	2521554
7	Botad	02849	231301	231302		2426810		231407			
8	Dahod	02673	239001	239005	9978406207	239066	9978406232	222300	9978405068	9978405179	239277
9	Dang	02631	220201	220294	9978406208	220254	9978406233	220248	9978405021	9978405180	220347
10	Gandhinagar	079	23259030	23259040	9978406209	23222618	9978406234	23210901	9978405070	9978405181	23256639
11	Jamnagar	0288	2555869	2555899	9978406210	2553901	9978406235	2554203	9978405071	9978405210	2553404
12	Devbhumi Dwarka	02833	223804	232102		2553901		232002			
13	Junagadh	0285	2636100	2635599	9978406211	2635315	9978406236	2635633	9978405250	9978405211	2633448
14	Gir Somnath	02876	285001	285300	9978405934	2651001	7984978968	222250	9978405974	9727756448	285063/64
15	Kheda	0268	2553334	2553358	9978406212	2557262	9978406237	2550150	9978405072	9978405597	2553356
16	Kutch	02832	220020	250430	9978406213	250080	9978406238	250444	9978405073	9978405212	252347
17	Mehsana	02762	222200	222202	9978406214	222301	9978406239	222122	9978405074	9978405213	222220
18	Narmada	02640	222161	222171	9978406216	222086	9978406241	222315	9979405076	9978405188	224001
19	Navsari	02637	244999	281540	9978406215	244299	9978406240	245333	9978405075	9978405187	259401
20	Panchmahal	02672	242800	242899	9978406217	253377	9978406242	242200	9978405077	9978405189	242536
21	Mahisagar	02674	250666	250655		253377		250815			
22	Patan	02766	233301	233055	9978406218	232936	9978406243	230104	9978405078	9978405190	224830
23	Porbandar	0286	2221800	2222527	9978406219	2243804	9978406244	2211222	9978405079	9978405191	2220800
24	Rajkot	0281	2473900	2453621	9978406220	2477008	9978406245	2433444	9978405082	9978405218	2471573
25	Morbi	02822	241701	241602		247708		243471			
26	Sabarkantha	02772	241001	241611	9978406221	242350	9978406246	247333	9978405081	9978405219	249039
27	Arvali	02772	247800	247801		242350		247333			
28	Surat	0261	2652525	2655757	9978406222	2422160	9978406247	2651831	9978405082	9978405220	2465112
29	Surendranagar	02752	2820200	283862	9978406223	283752	9978406248	282100	9978405083	9978405224	283400
30	Tapi	02626	224460	221281	9978405364	222141	9978405263	220400	9978405488	9978405415	223332
31	Vadodara	0265	2423100	2431093	9978406224	2432027	9978406249	2412255	9978406094	9978405196	2427592
32	Chota Udaipur	02669	233003	233002	9978405937	2432027	9978406249	233077	9978405977	9824048430	
33	Valsad	02632	253613	243417	9978406225	253184	9978406250	254222	9978405085	9978405253	243238

State Level Emergency Contacts Number

<i>Sr. No.</i>	<i>EOCs/ Control rooms</i>	<i>Code</i>	<i>Contact Numbers</i>
<i>1</i>	<i>State Emergency Operation Center</i>	<i>079</i>	<i>23251900 23251902 23251914 F- 23251916</i>
<i>2</i>	<i>Relief Commissioner</i>	<i>079</i>	<i>23251509 23251568</i>
<i>3</i>	<i>Director of Relief</i>	<i>079</i>	<i>23251611 23251916 23251912</i>
<i>4.</i>	<i>CEO, GSDMA</i>	<i>079</i>	<i>23259220 23259275 23259289</i>
<i>5</i>	<i>Pri. Secretary Revenue Department</i>	<i>079</i>	<i>23251591 23251591</i>
<i>6</i>	<i>Dy. Collector (SEOC)</i>	<i>079</i>	<i>23251990 23251916-12</i>
<i>7</i>	<i>India Methodology Department , Ahmadabad</i>	<i>079</i>	<i>22865012 22865449 22865165 22861413</i>
<i>8</i>	<i>Institute of seismological Gandhinagar</i>	<i>079</i>	<i>66739000 23257641 23252703</i>
<i>9</i>	<i>NDRF team Gandhinagar</i>	<i>079</i>	<i>23201551 F- 23202540</i>
<i>10</i>	<i>Commandant of NDRF team Gandhinagar</i>	<i>079</i>	<i>23202540 094288 26445</i>
<i>11</i>	<i>District EOC Help line</i>	<i>02876</i>	<i>1077</i>
<i>12</i>	<i>Stats EOC Help line</i>		<i>1070</i>

2. District Level Officers Telephone Nos. STD Code - (02876)

Sr.	Designation	Name	Office	Resi.	Mobile	Fax
1	Collector	Shri .Ajay Prakash(IAS)	240001	240005	9978405934	285300
2	DDO	Shri.D.B.Rahevar	249250		7984978968	249255
3	DSP	Shri Rahul Tripathi (IPS)	222250	-	9978405974	222110
4	Resi. Add. Collector	Shri.H.R.Modi	240003		9727756448	285300
5	DRDA	Shri. S. K. Modi	02876-245271		9825977660	-
6	DSO	Smt.S.D.Patel	240011		9429627093	240002
7	SDM- Veraval	Shri.Nitin Sangwan	243322	243012	9978405344	221672
8	SDM- Una	Shri. M K Prajapati	02875 226600	-	7567009879	226555
9	Dy. DDO (Revenue)	Shri.I.G.Gohil	249249		7567863927	249255
10	CDHO	Shri.B.L.Acharya	244298		7567889923	
11	DEO	Shri.B.S.Kaila	02876-221095		7574822584	221095
12	DPEO	Shri.Dr.M.R.Sagarka	02876-244500-		9099098483 9638968792	-
13	General Manager DIC	Shri K. L. Gamit			9825974912	
14	Ast.Dir.Info	Shri.S.K.Parmar	240108	-	8460062921	240109
15	DPO (GSDMA)	K.S.Trivedi	285063/64		9426969236	285300
16	Control Room Dy.Mam. Disaster	--	02876-285063/64	--	--	--

3. List of Taluka Level Important Phone Numbers.

Sr.	Taluka	STD Code No.	Mamalatdar		TDO		Police Station	
			Office	Fax	Office	Fax	Office	Fax
1	Veraval	02876	244299	244999	220267	245865	242040	242040
2	Talala	02877	222222	223232	222221	222221	222233	222233
3	Sutrapada	02876	264071	264071	263911	263111	263337	263337
4	Una	02875	222039	222339	221622	223635	223394	222045
5	Kodinar	02795	221244	222325	221524	222325	221504	221504
6	Gir Gadhada	02875	243100	243100	221622	223635	243321	243321

4.Chief Officer's Contact of all Nagar Palika.

Sr	NagarPalika	Office	Fax
1	Una	02875 – 221666	222053
2	Veraval	02876 – 220290	244947
3	Talala	02877 – 223111	222264
4	Sutrapada	02876 – 263016	264110
5	Kodinar	02795 – 221411	220912

5.પોલીસ અધિક્ષકની કચેરી, ગીર સોમનાથ કચેરી ટેલીફોન નંબરનું પત્રક

ક્રમ	અધિકારીનું નામ	હોદ્દો	ફરજનું સ્થળ	ફોનનંબર	ઓફિસ	મોબાઇલ નંબર
૧	શ્રી રાહુલ ત્રિપાઠી, ips	SP	ગીર સોમનાથ	૦૨૮૭૬	૨૨૨૨૫૦	૯૯૭૮૪૦૫૯૭૪
૨	શ્રી એચ.કે.રાવલ	UHC	I/C PA to SP	૦૨૮૭૬	૨૨૨૨૫૦	૯૯૦૯૫૭૬૭૬૩
૩	પોલીસ કંટ્રોલ રૂમ	CONTROL ROOM	કંટ્રોલ રૂમ	૦૨૮૭૬	૨૨૨૧૦૧	FAX ૨૨૨૧૧૦
૪	શ્રી એમ.એમ.પરમાર	DYSP	મુખ્ય મથક	૦૨૮૭૬	૨૨૩૧૦૧	૯૯૭૮૪૦૭૯૬૫ ૯૯૨૫૧૪૩૫૯૫
૫	શ્રી જી.બી.બાંભણીયા	DYSP	SC/ST શાખા	૦૨૮૭૬	૨૪૩૧૧૦	૯૯૭૮૪૦૭૯૬૭ ૯૦૯૯૯૩૯૦૯૯
૬	શ્રી પી.એમ.પ્રજાપતી	Pro.DYSP	તાલીમ લીવ રીઝર્વ	૦૨૮૭૬	૨૨૨૧૦૧	૯૪૨૯૭૪૪૧૦૧ ૯૫૮૬૯૦૩૦૧૦
૭	શ્રી કે.જે.ચૌહાણ	PSI	LCB શાખા	૦૨૮૭૬	૨૨૪૭૭૭	૭૫૬૭૮૮૮૮૬૭
૮	શ્રી વી.આર.સોનારા	PSI	SOG શાખા	૦૨૮૭૬	૨૨૨૨૬૧	૯૭૨૪૭૩૯૧૪૯
૯	શ્રી આર.વી.વાજા	PI	LIB શાખા	૦૨૮૭૬	૨૨૪૭૭૮	૮૯૮૦૦૪૧૨૦૦
૧૦	શ્રી એમ.એમ.સોનરાત	I/C PI	I/C રીડર શાખા	૦૨૮૭૬	૨૨૪૭૭૯	૯૮૨૫૬૫૩૪૭૦
૧૧	શ્રી વાય.એચ.યુસુફજી	WHC	I/C અરજી શાખા	૦૨૮૭૬	૨૨૪૭૭૯	૮૭૩૩૦૧૧૪૪૨
૧૨	શ્રી એ.બી.રાહોડ	UASI	I/C MOB શાખા	૦૨૮૭૬	૨૨૨૧૦૧	૯૬૬૨૮૩૯૫૪૨
૧૩	શ્રી પી.વી.સાંખટ	W.PSI	મહીલા પો.સ્ટે.	૦૨૮૭૬	૨૩૧૨૧૭	૯૮૨૪૨૮૧૫૬૦
૧૪	શ્રી એમ.એસ.જાડેજા	RSI	પો.હેડ.કવા.	૦૨૮૭૬	૨૪૦૦૩૬	૮૨૩૮૦૯૬૮૯૧
૧૫	શ્રી ડી.આર.મેઘનાથી	QRT PSI	કચુ.આર.ટી.	૦૨૮૭૬	૨૪૦૦૩૬	૯૮૨૫૪૧૪૮૮૭
૧૬	શ્રી પી.આર.હુડડ	QRT PSI	કચુ.આર.ટી.	૦૨૮૭૬	૨૪૦૦૩૬	૯૯૨૪૬૨૧૩૩૧
૧૭	શ્રી એમ.એસ.સોલંકી	QRT PSI	કચુ.આર.ટી.	૦૨૮૭૬	૨૪૦૦૩૬	૯૪૨૮૦૩૮૩૯૩
૧૮	શ્રી એચ.એમ.આદ્રોજા	QRT PSI	કચુ.આર.ટી.	૦૨૮૭૬	૨૪૦૦૩૬	૯૯૦૯૯૬૪૩૦૩
૧૯	શ્રી કે.પી.વાઢેર	PWSI	ક્રોમ્યુટર શાખા	૦૨૮૭૬	૨૨૪૭૮૦	૯૮૨૫૫૬૭૩૫૭
૨૦	શ્રી ડી.આર.મેઘનાથી	MT PSI	I/C MT PSI	૦૨૮૭૬	૨૨૪૦૦૨	૯૮૨૫૪૧૪૮૮૭
૨૧	શ્રી વી.જી.પરમાર	UASI	I/C PEROL	૦૨૮૭૬	૨૨૨૧૦૧	૮૪૬૯૬૯૯૩૯૦
૨૨	શ્રી એસ.એચ.ભુવા	PSI	લીવ રીઝર્વ	૦૨૮૭૬	૨૨૨૧૦૧	૯૯૨૪૩૮૦૫૧૧

૨૩	શ્રી એમ.કે.ભીંગરાડીયા	P.PSI	તાલીમ લીવ રીઝર્વ	૦૨૮૭૬	૨૨૨૧૦૧	૮૦૦૦૪૩૮૩૦૮
૨૪	શ્રી એમ.એચ.પટેલ	P.PSI	તાલીમ લીવ રીઝર્વ	૦૨૮૭૬	૨૨૨૧૦૧	૯૭૨૫૪૨૨૬૪૦
૨૫	શ્રી એચ.વી.ચુડાસમા	P.PSI	તાલીમ લીવ રીઝર્વ	૦૨૮૭૬	૨૨૨૧૦૧	૭૩૮૩૭૦૦૦૨
૨૬	શ્રી એચ.બી.મુસાર	P.PSI	તાલીમ લીવ રીઝર્વ	૦૨૮૭૬	૨૨૨૧૦૧	૯૯૭૮૮૭૦૮૨૯
૨૭	શ્રી એસ.ડી.માળી	W.P.PSI	તાલીમ લીવ રીઝર્વ	૦૨૮૭૬	૨૨૨૧૦૧	૯૭૨૫૮૮૧૧૭૭
૨૮	શ્રી જી.કે.બારીયા	W.P.PSI	તાલીમ લીવ રીઝર્વ	૦૨૮૭૬	૨૨૨૧૦૧	૯૬૨૪૪૮૪૨૬૨
૨૯	શ્રી ડી.બી.પીઠીયા	PSI	આર.આર.સેલ	૦૨૮૫	૨૬૨૧૧૫૨	૯૯૧૩૬૯૯૧૯૯

વેરાવળ ડિવીઝનના પોલીસ અધિકારીશ્રીઓના ટેલીફોન નંબરનું પત્રક

ક્રમ	અધિકારીશ્રીનું નામ	હોદ્દો	ફરજનું સ્થળ	કોડ નંબર	ફોન નંબર	મોબાઇલ નંબર
૧	શ્રી અમીત વસાવા	ASP	વેરાવળ ડિવીઝન	૦૨૮૭૬	૨૪૨૪૬૬ ૨૪૩૭૨૯	૯૯૭૮૪૦૭૯૬૮ ૯૬૬૨૫૩૩૦૮૪
	કુ.શ્રી એચ.એમ.અગ્રાવત	P.PSI	રીડર ટુ DYSP	૦૨૮૭૬	૨૪૩૭૨૯	૭૮૭૪૫૨૭૩૫૩
૨	શ્રી બી.એમ.મોઢવાડીયા	PSI	I/C PI વેરાવળ સીટી	૦૨૮૭૬	૨૪૨૦૪૦	૯૯૦૯૯૩૧૮૭૮
	શ્રી આર.એ.ચનીયારા	W.PSI	વેરાવળ સીટી	૦૨૮૭૬	૨૨૦૦૦૩	૯૬૮૭૬૫૨૪૪૪
૩	શ્રી જી.એમ.રાઠવા	PI	પ્રભાસ પાટણ	૦૨૮૭૬	૨૩૧૬૩૧	૯૯૦૯૭૬૩૧૩૫
	શ્રી કે.જી.ચાવડા	PSI	પ્રભાસ પાટણ	૦૨૮૭૬	૨૩૧૨૧૩	૯૫૧૨૬૧૨૨૫૫
	શ્રી ડી.જે.કડછા	PSI	પ્રભાસ પાટણ	૦૨૮૭૬	૨૩૧૨૧૩	૯૮૨૪૯૫૪૬૮૫
	શ્રી વી.આર.ભુતીયા	PSI	પ્રભાસ પાટણ	૦૨૮૭૬	૨૩૧૨૧૩	૯૮૭૯૯૪૫૯૫૧
૪	શ્રી એ.એમ.હેરમા	PSI	I/C PI કોડીનાર	૦૨૭૯૫	૨૨૧૫૦૫	૯૪૨૬૦૩૧૩૦૨
	શ્રી બી.એસ.સોલંકી	PSI	કોડીનાર	૦૨૭૯૫	૨૨૧૫૦૪	૯૬૮૭૬૫૨૪૫૧
	કુ.શ્રી કે.એન.અઘેરા	PSI	કોડીનાર	૦૨૭૯૫	૨૨૧૫૦૪	૯૯૭૮૧૮૭૧૫૦
	શ્રી સી.એન.દવે	P.PSI	કોડીનાર	૦૨૭૯૫	૨૨૧૫૦૪	૭૮૭૪૩૫૮૫૮૫
	શ્રી કે.વી.પરમાર	P.PSI	કોડીનાર	૦૨૭૯૫	૨૨૧૫૦૪	૯૦૩૩૭૭૩૦૯૯
૫	શ્રી ડી.ડી.ગોહીલ	PI	ઉના	૦૨૮૭૫	૨૨૩૩૯૪	૭૫૬૭૮૯૮૨૦૭
	શ્રી આર.એન.રાજયગુરુ	PSI	ઉના	૦૨૮૭૫	૨૨૪૭૬૬	૯૯૦૯૦૩૮૩૮૧
	શ્રી જે.વી.ચુડાસમા	PSI	ઉના	૦૨૮૭૫	૨૨૪૭૬૬	૯૮૨૪૮૮૨૫૨૯
	શ્રી એસ.એમ.બાબી	PSI	ઉના	૦૨૮૭૫	૨૨૪૭૬૬	૯૮૨૪૨૮૯૪૯૫
૬	શ્રી એસ.એચ.ભુવા	PSI	I/C PSI સુત્રાપાડા	૦૨૮૭૭	૨૬૩૩૩૭	૯૯૨૪૩૮૦૫૧૧
૭	શ્રી વી.આર.રાઠોડ	CPI	તાલાલા	૦૨૮૭૭	૨૨૧૦૪૪	૯૭૧૨૯૩૦૬૭૦
	શ્રી એ.પી.સોલંકી	PSI	તાલાલા	૦૨૮૭૭	૨૨૨૨૩૩	૯૯૨૫૧૫૬૯૯૭
૮	કુ.શ્રી કે.એન.અઘેરા	PSI	I/C PSI ગીરગઢડા	૦૨૮૭૫	૨૪૩૩૨૧	૯૯૭૮૧૮૭૧૫૦
૯	શ્રી બી.એન.ખાંભલા	PI	સોમનાથ મરીન	૦૨૮૭૬	૨૩૨૧૦૧	૮૯૮૦૦૪૯૬૩૦
૧૦	શ્રી એસ.આઇ.મંધરા	PSI	નવાબંદર મરીન	૦૨૮૭૫	૨૪૪૩૫૫	૯૦૯૯૫૧૨૧૨૧

સોમનાથ મંદીર સુરક્ષા પોલીસ અધિકારીશ્રીઓના ટેલીફોન નંબરનું પત્રક

ક્રમ	અધિકારીશ્રીનું નામ	હોદ્દો	ફરજનું સ્થળ	કોડ નંબર	ફોન નંબર	મોબાઇલ નંબર
૧	શ્રી એસ.એફ.વાઢેર	DYSP	સોમનાથ મંદીર સુરક્ષા	૦૨૮૭૬	૨૩૨૨૨૩	૯૯૦૯૦૩૭૦૭૦
૨	શ્રી વી.એમ.ખુમાણ	PI	સોમનાથ મંદીર સુરક્ષા	૦૨૮૭૬	૨૩૨૨૨૩	૯૭૨૭૭૮૭૧૯૦
૩	શ્રી કે.વી.વાળા	PSI	સોમનાથ મંદીર સુરક્ષા	૦૨૮૭૬	૨૩૨૨૨૩	૮૧૨૮૦૫૦૪૨૨

ગીર સોમનાથ જીલ્લાના પોલીસ સ્ટેશનના ટેલીફોન નંબરનું પત્રક

૧	વેરાવળ	૦૨૮૭૬	૨૨૦૦૦૩	
૨	પ્રભાસ પાટણ	૦૨૮૭૬	૨૩૧૨૧૩	
૩	કોડીનાર	૦૨૭૯૫	૨૨૧૫૦૪	
૪	ઉના	૦૨૮૭૫	૨૨૪૭૬૬	
૫	તાલાળા	૦૨૮૭૭	૨૨૨૨૩૩	
૬	સુત્રાપાડા	૦૨૮૭૬	૨૬૩૩૩૭	
૭	ગીરગઢડા	૦૨૮૭૫	૨૪૩૩૨૧	
૮	સોમનાથ મરીન	૦૨૮૭૬	૨૩૨૧૦૧	
૯	નવાબંદર મરીન	૦૨૮૭૫	૨૪૪૩૫૫	

પોલીસ અધિક્ષકની કચેરી, ગીર સોમનાથ બ્રાંચોના ટેલીફોન નંબરનું પત્રક

૧	પોલીસ અધિક્ષક	૦૨૮૭૬	૨૨૨૨૫૦	ફેક્સ - ૨૨૨૧૧૦
૨	પોલીસ કંટ્રોલરૂમ	૦૨૮૭૬	૨૨૨૧૦૧	
૩	DYSP (HQ)	૦૨૮૭૬	૨૨૩૧૦૧	
૪	DYSP (SC/ST)	૦૨૮૭૬	૨૪૩૧૦૧	
૫	કચેરી અધિક્ષક	૦૨૮૭૬	૨૨૨૨૭૧	
૬	વહીવટી શાખા	૦૨૮૭૬	૨૪૦૦૩૫	
૭	હીસાબી શાખા	૦૨૮૭૬	૨૪૦૦૩૪	
૮	રીડર શાખા	૦૨૮૭૬	૨૨૪૭૭૯	
૯	LIB શાખા	૦૨૮૭૬	૨૨૪૭૭૮	
૧૦	LCB શાખા	૦૨૮૭૬	૨૨૪૭૭૭	
૧૧	SOG શાખા	૦૨૮૭૬	૨૨૨૨૬૧	
૧૨	કોમ્પ્યુટર શાખા	૦૨૮૭૬	૨૨૪૭૮૦	
૧૩	પો.હેડ.કવાર્ટર	૦૨૮૭૬	૨૪૦૦૩૬	
૧૪	વાયરલેશ શાખા	૦૨૮૭૬	૨૪૦૦૩૬	
૧૫	બી.ડી.ડી.એસ. શાખા	૦૨૮૭૬	૨૪૦૦૩૬	
૧૬	એમ.ટી. શાખા	૦૨૮૭૬	૨૨૪૦૦૨	
૧૭	માઉન્ટેડ શાખા	૦૨૮૭૬	૨૩૧૨૧૩	

ક્રમ	કર્મચારીનું નામ	હોદ્દો	ફરજનું સ્થળ	કોડ નંબર	ફોન નંબર	મોબાઇલ નંબર
૧	શ્રી આઇ.એ.હાથલીયા	ઓ.એસ.	કચેરી અધિક્ષક	૦૨૮૭૬	૨૨૨૨૭૧	૯૪૨૯૩૨૧૩૨ ૦
૨	શ્રી એન.વી.વાળા	હે.કા.	સીબી,એસબી,એકાઉન્ટ	૦૨૮૭૬	૨૪૦૦૩૫	૯૮૨૪૨૯૬૪૭ ૭
૩	શ્રી એન.એન.શીંગરખીયા	સી.કા.	સી.બી.-૧ શાખા	૦૨૮૭૬	૨૪૦૦૩૫	૯૯૭૯૫૬૦૮૭ ૪
૪	શ્રી ડી.એન.બારડ	જુ.કા.	સીબી-૧(એ) શાખા	૦૨૮૭૬	૨૪૦૦૩૫	૮૮૬૬૫૬૭૨૦ ૦
૫	શ્રી એમ.બી.રાહોડ	જુ.કા.	સીબી-૨ શાખા	૦૨૮૭૬	૨૪૦૦૩૫	૯૨૨૭૮૪૮૪૮ ૮
૬	શ્રી કુ. કે.ટી.મોરી	જુ.કા.	સીબી-૩ શાખા	૦૨૮૭૬	૨૪૦૦૩૫	૯૬૦૧૧૫૩૬૯ ૦
૭	શ્રી જે.બી.ચોપડા	જુ.કા.	સી.બી.-૪ શાખા	૦૨૮૭૬	૨૪૦૦૩૫	૯૭૨૩૮૧૫૮૩ ૮
૮	શ્રી એમ.પી.જોટવા	જુ.કા.	સી.બી.-એમ.ટી. શાખા	૦૨૮૭૬	૨૪૦૦૩૫	૯૭૨૪૪૮૧૪૪ ૬
૯	શ્રી પી.એલ.ગૌસ્વામી	સી.કા.	એસ.બી.-૧ શાખા	૦૨૮૭૬	૨૪૦૦૩૫	૯૯૨૫૨૩૮૨૮ ૧
૧૦	શ્રી બી.જી.ડોડીયા	સી.કા.	એસ.બી.-૨, ડીપી શાખા	૦૨૮૭૬	૨૪૦૦૩૫	૯૯૦૯૭૭૩૧૬ ૭
૧૧	શ્રી કુ.એસ.વી.નકુમ	જુ.કા.	એસ.બી.-૩ શાખા	૦૨૮૭૬	૨૪૦૦૩૫	૮૪૬૦૮૩૧૧૨ ૪
૧૨	શ્રી બી.જે.બાંભણીયા	જુ.કા.	એસ.બી.-૪ શાખા	૦૨૮૭૬	૨૪૦૦૩૫	૮૧૫૩૯૦૮૧૩ ૫
૧૩	શ્રી આર.એમ.રાણીંગા	સી.કા.	હીસાબી શાખા	૦૨૮૭૬	૨૪૦૦૩૪	૯૭૩૭૩૬૯૯૦ ૧
૧૪	શ્રી કુ.જે.આર.જીણીયા	જુ.કા.	પગાર શાખા	૦૨૮૭૬	૨૪૦૦૩૪	૮૪૬૦૪૩૦૯૫ ૦
૧૫	શ્રી જે.કે.બારડ	જુ.કા.	પગાર-૨ શાખા	૦૨૮૭૬	૨૪૦૦૩૪	૮૭૩૪૮૨૫૨૫ ૯
૧૬	શ્રી કે.એમ.વાળા	જુ.કા.	વેલ્ફરશાખા	૦૨૮૭૬	૨૪૦૦૩૪	૯૨૨૭૨૪૫૫૫

						૫
૧૭	શ્રી એ.એ.ભાદરકા	જુ.કા.	કન્ડીજન્સી શાખા	૦૨૮૭૬	૨૪૦૦૩૪	૯૦૩૩૧૫૬૯૮ ૨
૧૮	શ્રી કુ.એસ.જે.પરમાર	જુ.કા.	એકાઉન્ટ શાખા	૦૨૮૭૬	૨૨૨૧૦૧	૯૬૬૪૮૫૦૯૮ ૯
૧૯	શ્રી વાચ.વી.ઝણકાટ	જુ.કા.	રજીસ્ટ્રી શાખા	૦૨૮૭૬	૨૨૨૧૦૧	૭૦૧૬૭૩૩૧૮ ૪
૨૦	શ્રીમતી વી.કે.બારડ	જુ.કા.	ટપાલ આવક	૦૨૮૭૬	૨૨૨૧૦૧	૭૨૦૧૯૬૦૪૧ ૧
૨૧	શ્રી કુ. દેવીબેન	LPC	ટપાલ જાવક	૦૨૮૭૬	૨૨૨૧૦૧	૯૪૦૮૫૧૯૯૧ ૧
૨૨	શ્રી એ.આર.જાદવ	જુ.કા.	ના.પો.અધિ.શ્રીની કચેરી વેરાવળ	૦૨૮૭૬	૨૪૩૭૨૯	૮૩૪૭૫૦૧૫૨ ૦
૨૩	શ્રી વી.સી.ગૌસ્વામી	AASI	બેંક ઓડલી	૦૨૮૭૬	૨૪૦૦૩૪	૯૯૦૪૦૨૯૧૮ ૮

6. Community Health Centres (CHC) Contact Details.

Sr.	Taluka	CHC	Superintendent / M.O.	Ph. No.	Mobile
1	Kodinar	Kodinar	Dr. A. K. Pande	02795-221529	9824228264
2	Sutrapada	Sutrapada	Dr. H. R. Chudasama	02876-263833	9925079600
3	Talala	Talala	Dr. A. P. Makadiya	02877-222502	9428575607
4	Una	Gir-Gadhada	Dr. V. A. Abhani	02875-243737	8238015104
5	Una	Una	Dr. T. Y. Bloch	02875-222044	9824527120
6	Veraval	Prabhash Patan	Dr. H. T. Kansagara	02876-231852	9426944864
7	Veraval	Civil Hospital Veraval	Dr. M. K. Makwana	02876-244298	9879842503

7. Trained Men Powers & SWIMMERS – Gir Somnath DISTRICT

Sr	Taluka	Trainin g	Person Name	Categor y	Organization	Contact
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Sr	Taluka	Trainin g	Person Name	Categor y	Organization	Contact
1	Kodinar	FRT	Makvana Kalubhai R.	GRD	Malgam Kodinar	283530
2	Kodinar	FRT	Sabhaya Nagjibhai P.	GRD	Malgam Kodinar	283530
3	Kodinar	FRT	Solanki Bhupatbhai B.	GRD	Malgam Kodinar	283530
4	Kodinar	FRT	Vansh Rajabhai U.	GRD	Malgam Kodinar	283530
5	Kodinar	FRT	Vyas Maheshkumar R.	GRD	Malgam Kodinar	283530
6	Kodinar	FRT	Barad Pradipsinh B.	HG	Devdi, Kodinar	282513
7	Kodinar	FRT	Barad Rohitkumar Jesingbhai	HG	Devdi, Kodinar	220175, 242106
8	Kodinar	FRT	Dahima Jagjitsinh Rajabhai	HG	Devdi Kodinar	220056, 282360
9	Kodinar	FRT	Jagdishbhai K. Gohil	HG	Malgam, Kodinar	283803
10	Kodinar	FRT	Jagjitsinh Rambhai Dahima	HG	Devali, Kodinar,	220056, 282360
11	Kodinar	FRT	Jayeshkumar Bagavantbhai Mori	HG	Devali, Kodinar	242106, 220175
12	Kodinar	FRT	Lakshmanbhai Devsibhai Vala	HG	Malgam, Kodinar	283530
13	Kodinar	FRT	Patel Bhaveshbhai Bhailalbhai	HG	Devdi Kodinar	242106, 220175
14	Kodinar	FRT	Pradipsinh B. Barad	HG	Devali, Kodinar	282531
15	Kodinar	FRT	Rohitkumar J. Barad	HG	Devali, Kodinar	220175, 242106
16	Kodinar	FRT	Solanki Jagdishbhai K.	HG	Malgam Kodinar	283803
17	Kodinar	FRT	Vala Laxmanbhai D.	HG	Malgam Kodinar	283530
18	Prabhas Patan	FRT	Dheracha Kanabhai Bajrangbhai	HG	Prabhas Patan	231114
19	Prabhas Patan	FRT	Dheracha Ramjibhai Ukabhai	HG	Prabhas Patan	231913
20	Prabhas Patan	FRT	Gadhiya Jesingbhai Bhikhabhai	HG	Prabhas Patan	231114
21	Prabhas Patan	FRT	Gadhiya Kantilal Masribhai	HG	Prabhas Patan	231913
22	Sutrapada	FRT	Solanki Ukabhai R.	GRD	GRD	263337
23	Sutrapada	FRT	Vaja Ukabhai B.	GRD	GRD	263337
24	Sutrapada	FRT	Naghera Dhana Ramsi	Constabl e	Harnasa	263337
25	Sutrapada	FRT	Kamliga Lakhman B.	Constabl e	Vachalapada	263337
26	Sutrapada	FRT	Vala Lakhman Bachu	Voluntee r	Barula	9825696572
27	Sutrapada	FRT	Kachhot Jeyesh Devasi	GRD	Lodhava	9924967552
28	Talala	FRT	Bachubhai K. Garchar	HG	Talala (Gir)	222329

Sr	Taluka	Trainin g	Person Name	Categor y	Organization	Contact
29	Talala	FRT	Dineshbhai Chiman C.	HG	Talala (Gir)	222329
30	Talala	FRT	Garchar Bachubhai K.	HG	Talala Gir	241572
31	Talala	FRT	Kathad Nandlal N.	HG	Talala Gir	222329
32	Talala	FRT	N. N. Kathad	HG	Talala (Gir)	241572
33	Talala	FRT	Rajubhai N.Thakrar	HG	Talala (Gir)	222329
34	Talala	FRT	Rameshbhai Rugnath Kanabar	HG	Talala (Gir)	222329, 241572
35	Talala	FRT	Thakrar Rajubhai N.	HG	Talala Gir	222329
36	Una	FSR	Bambhaniya Manubhai Bhavan	MS	Municipality	02875- 222053
37	Una	FSR	Chudasama Babu M.	MS	Municipality	222053
38	Una	FSR	Rathod Ashokbhai Lakhmanbhai	MS	Municipality	02875- 222053
39	Una	FSR	Rathod Vijaybhai Bhikhabhai	MS	Municipality	02875- 222053
40	Una	FRT	Sankhat Nilesh Soma	Police	Simar, Una	222053
41	Veraval	FRT	Chudasama Karsan N.	GRD	GRD	222003
42	Veraval	FRT	Khuntad Kala Jesa	GRD	GRD	220003
43	Veraval	FRT	Rathod Babu Pancha	GRD	GRD	220003
44	Veraval	FRT	Rathod Karsanbhai P.	GRD	GRD	220003
45	Veraval	FRT	Vandher Nathabhai R.	GRD	GRD	220003
46	Veraval	FRT	Jesabhai B.Gathiya	HG	PrabhasPatan,	231114
47	Veraval	FRT	Kanabar Rameshbhai R.	HG	Veraval,	231114
48	Veraval	FRT	Kanabhai V.Dharima	HG	Prabhas Patan	231114
49	Veraval	FRT	Kantilal M.Gathiya	HG	Prabhas Patan	231913
50	Veraval	FRT	Ramjibhai U. Dhareya	HG	Prabhas Patan	231213
51	Veraval	FSR	Bamaniya Mansukh B.	MS	Municipality	220290
52	Veraval	FSR	Kotiya Dharramshi N.	MS	Municipality	220290
53	Veraval	FSR	Suyani Jashvant Ramji	MS	Municipality	220290
54	Veraval	FSR	Vada Girish Kanji	MS	Municipality	220290
55	Veraval	FRT	Vala Naresh Bhagvan	GRD	Bodas, Veraval	9879968741
56	Veraval	FRT	Solanki Ramesh Hira	GRD	Sonariya	9978179384
57	Veraval	FRT	Solanki Nimesh Rama	GRD	Prabhas Patan	9275243932

Training Type		Category	
FSR	Fire Search & Rescue Training	FP	Fire Personnel of Municipal Corporation
MHSnR	Multi Hazard Search & Rescue Training	MS	Municipality Staff Members
FRT	Flood Rescue Training	GRD	Gram Rakshak Dal
		HG	Trained Homeguard Personnel

General Terminology Used in Weather Bulletins

(A). Intensity of Rainfall Terminology Used

<i>Sr. No.</i>	<i>Rain in mm”(24 hrs)</i>	<i>Terminology</i>
<i>1</i>	<i>0.1.mm to 2.4 mm”</i>	<i>Very light rain</i>
<i>2</i>	<i>2.5 mm to 7.5 mm”</i>	<i>Light rain</i>
<i>3</i>	<i>7.6 mm to 34.9 mm”</i>	<i>Light to Moderate rain</i>
<i>4</i>	<i>35.0 mm to 64.9 mm”</i>	<i>Moderate rain</i>
<i>5</i>	<i>65.0 mm to 124.9 mm”</i>	<i>Heavy rain</i>
<i>6</i>	<i>Exceeding 125 mm”</i>	<i>Very Heavy rain</i>

(B) Special distribution of weather phenomenon

<i>Sr. No.</i>	<i>Percentage Area Covered</i>	<i>Terminology Used</i>
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1	1 to 25	<i>Isolated</i>
2	26 to 50	<i>Few Places</i>
3	51 to 75	<i>Many Places</i>
4	76 to 100	<i>At most Places</i>

(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 may lead to disaster.
4. When water levels are rising alarmingly.

(D) Evacuation

Sr. No.	Signal	Activity
1	<i>White Signal</i>	<i>Alert condition</i>
2	<i>Blue Signal</i>	<i>Ready for Evacuation</i>
3	<i>Red Signal</i>	<i>Immediate Evacuation</i>

Annexure

Dos and don'ts in various disaster Cyclone Safety

A cyclone is a storm accompanied by high-speed whistling and howling winds. It brings torrential rains.

Where does a cyclone come from?

A cyclonic storm develops over tropical oceans like the Indian Ocean and Bay of Bengal and the Arabian Sea. Its strong winds blow at great speed, which can be more than 118 kilometers per hour.

What are the visible signs of a cyclone?

When a cyclonic storm approaches, the skies begin to darken accompanied by lightning and thunder and a continuous downpour of rain.

How does a cyclone affect us?

- A cyclone causes heavy floods.
- It uproots electricity supply and telecommunication lines. Power supply shuts down and telephones stop functioning.

- *Road and rail movements come to halt because floods damage rail tracks and breach roads. Rail movements are also disrupted because of communication failure.*
- *The inclement weather conditions also disrupt Air services. Seaports stop work due to high winds, heavy rains and poor visibility. Sometimes ships overturn or are washed ashore. The high speed winds bends and plucks out trees and plants.*
- *A cyclone tears away wall sidings and blows off roofs of houses.*
- *Houses collapse and people are rendered homeless. In villages kachha houses get blown away. The speeding winds cause loose metal and wooden sheets to fly turning them to potential killers. Broken glass pieces can cause serious injuries.*
- *The floodwaters can take time to recede.*
- *The floodwaters can turn the fields salty.*
- *Bridges, dams and embankments suffer serious damages.*
- *Floods wash away human beings and animals and make water unfit for drinking. There can be outbreak of diseases like Cholera, Jaundice or Viral fever due to intake of impure water. Water gets contaminated because of floating corpses of animals and human beings and mixing of sewage stored food supplies, gets damaged.*

Which areas are exposed to a cyclone in Gujarat?

In Gujarat, the Saurashtra-Kachchh region experiences a cyclone. The port towns of Veraval, Porbandar, Jamnagar, Dwarka, Okha, Kandla and Bhavnagar and other minor port towns suffer most.

Does a cyclone follow a particular path?

It is often difficult to predict where a cyclone will strike. When it starts moving from oceans (in Gujarat it is Arabian Sea) towards the land area, a cyclone can change track and hit areas other than those anticipated earlier.

Has any early warning system been evolved for the occurrence of a cyclone?

Yes. In India, the Indian Meteorological Department has developed a four-stage warning system for a cyclone.

How does the system operate?

This warning is about the possibility of a cyclone when a low pressure depression develops in oceans. For Gujarat, the development of such a depression in the Arabian Sea is indicative of a cyclone attack.

- ***The Alert stage***

This warning is given 48 hours prior to the time when a cyclone is expected to hit the land.

- ***The Warning stage***

This is the stage when a cyclone gets formed. The warning is given 24 hours before the anticipated time of arrival of a cyclone.

- ***Cyclone arrival***

This warning is issued 12 hours before a cyclone is due to hit the land. The warning gives information about cyclone and will continue until the winds subside. In sea ports, danger signal are hoisted about the impending cyclone.

From where can people access cyclone storm warnings?

Warnings about storms, their intensity and the likely path they may take are regularly broadcasted by radio and television network continuously until the storm passes over.

What to do before and during a cyclone.

- *Have your dwellings checked before a cyclone season starts and carry out whatever repairs that are needed.*
- *Talk to children and explain about cyclones without scaring them.*
- *Create storm awareness by discussing effects of a cyclonic storm with family members so that everyone knows what one can and should do in an emergency. This helps to remove fear and anxiety and prepares everyone to respond to emergencies quickly.*
- *Keep your valuables and documents in containers, which cannot be damaged by water.*
- *Keep information about your blood group.*
- *Keep lanterns filled with kerosene, torches and spare batteries. These must be kept in secure places and handy.*
- *Make plans for people who are either sick, suffer from disabilities, aged and children.*
- *Store up at least seven-day stock of essential food articles, medicines and water supply.*
- *Keep blankets & clothes ready for making beds. Also keep cotton bandages and several copies of photographs of family members in case they are needed for identification purposes after the storm.*
- *Store some wooden boards so that they can be used to cover windows.*
- *Keep trees and shrubs trimmed. Remove damaged and decayed parts of trees to make them resist wind and reduce the potential for damage. Cut weak branches and make winds blow through.*
- *All doors, windows and openings should be secured.*
- *Continue to listen to warning bulletins and keep in touch with local officials. Keep radio sets in working condition. Battery powered radio sets are desirable.*
- *Evacuate people to places of safety when advised.*
- *Take steps to protect your assets.*
- *Store extra drinking water in covered vessels.*
- *Remain calm.*

What one should not do during a Cyclone attack?

- *During the storm do not venture out unless advised to evacuate.*
- *If you have a vehicle and wish to move out of your house, leave early before the onset of a cyclone. It is often best to stay at home*
- *Avoid remaining on the top floor of dwellings. Stay close to the ground.*

Earthquake safety

- *Tell the facts about earthquake to your family members*
- *Construct new buildings with earthquake resistant method and strengthen the old buildings*
- *Insure your house and family members*
- *Take the training for first aid and fire fighting*
- *Do not keep cots near the glass window*
- *Do not keep heavy and fragile things in the selves*
- *Do don't hang photo frames, mirrors, or glasses up your bed*
- *Keep your important documents, some cash and necessary articles ready in a bag*
- *Get your house insured before the earthquake*
- *Identify special skills of neighbor (medical, technical) so that it can be utilized in emergency*

During Earthquake

- *Do not panic*
- *If already inside, than Stay indoors! Get under a heavy desk or table and hang on to it.*
- *If fire breaks out, drop on the floor and crawl towards the exist*
- *If you are out doors during the quake, keep away from buildings, trees and electricity lines. Walk towards open places, in a calm and composed manner.*
- *If you are driving, quickly but carefully move your car as far out of traffic as possible and stop. Do not stop on or under a bridge or overpass or under trees, light posts, power lines, or signs. Stay inside the car until shaking stops*
- *If you are in a school, get under a desk or table and hold on*

After the Earthquake

- *Do not be afraid of the aftershocks*
- *Listen to radio-TV and other media for Government Announcement*
- *Check for injuries to yourself and those around you. Take first aid where you can*
- *Extinguish fire, if any*
- *Examine walls, floors, doors, staircases and windows to make sure that the building is not in danger of collapsing*
- *Do not enter into the unsafe or risky houses or buildings*
- *Inspect for Gas leaks-If you smell gas or hear blowing or hissing noises, open a window and quickly leave the building. Don't light your kitchen stove if you suspect a gas leak.*
- *Do not keep telephone lines busy unnecessarily*
- *Switch off electric lines*

Fire safety

Dos

- *Buy Fireworks from the licensed shop.*
- *Keep fireworks in a closed box*
- *Store crackers away from source of fire or inflammation*
- *Follow all safety precautions issued with the fire works*
- *Go to open spaces like playgrounds, fields*
- *Light them at arm's length using a taper.*
- *Stand back while lighting the crackers*
- *Discard used fireworks in a bucket of water*
- *Keep buckets of water and blankets ready, in case a firebreaks out.*
- *Wear thick cotton clothes for maximum safety from fire.*
- *If clothes catch fire, Stop, Drop and Roll*
- *In case of uncontrolled fire wrap the victim in a blanket, till it stop.*
- *In case of burns splash tap water (not ice water), the process may be repeated till the burning sensation reduces.*
- *If fingers or toes are burned, separate them with dry, sterile, non-adhesive dressings.*
- *Make sure the burn victim is breathing, if breathing has stopped or if the victim's airway is blocked then open the airway and if necessary begin rescue breathing.*
- *Elevate the burned area and protect it from pressure and friction.*
- *Cover the area of the burn with a moist sterile bandage, of clean cloth (do not use blanket or towel for healing burns).*
- *Consult the doctor as soon as possible for the proper medication*
- *Consult an ophthalmologist immediately in case of eye injuries.*
- *Do contact at the Fire Brigade (Tel.No. 101), for getting the details of the doctors on duty during the festival.*

Don'ts

- *Don't burn crackers in crowded, congested places, narrow lanes or inside the house.*
- *Don't let children burst crackers unaccompanied by an adult*
- *Don't put fireworks in your pocket or throw them*
- *Don't cover crackers with tin containers or glass bottles for extra sound effect*
- *Don't dare to examine unburst crackers...leave it!! Light a new cracker*
- *Don't show the Dare-devilry of lighting crackers on own hands.*
- *Don't use fireworks inside a vehicle*
- *Avoid long loose clothes, as they are fast in catching fire*
- *Don't remove burnt clothing (unless it comes off easily), but do ensure that the victim is not still in contact with smoldering materials.*
- *Don't apply adhesive dressing on the burnt area.*
- *Don't break the burst blister*

Flood Safety

Do's and Don'ts after flood

- *There is a possibility of spread of water borne diseases after flood, and hence*
- *Medical treatment should be taken immediately.*
- *Do not enter deep, unknown waters.*

- *Do not go near the riverbank even after the floodwater has receded.*
- *Sprinkle medicines in the stagnant dirty water.*
- *Inspect your house for any cracks or other damage. Check all the walls, floor, ceiling, doors and windows, so that any chance of house falling down can be known and you can be aware about the immediate danger.*
- *If the floodwater has entered the house or has surrounded the house, then it is advisable not to enter such house.*
- *Keep listening to weather forecast on radio and television. Move to your residence only when instructed by the competent authority. It is not safe to believe that the problems have ended after the flood water have receded*
- *Inform the competent authority/officer for restoration of the necessary connections like gas, electricity, telephone, drainage, etc.*
- *Beware of the various insects or poisonous snakes that may have been dragged inside the house along with the floodwater.*
- *Destroy the food commodities that have been affected by floodwater.*
- *Check properly all the electric circuits, floor level furnace, boilers, gas cylinders, or electric equipments like motor pump etc. Check whether any inflammable or explosive item has not entered along with the floodwater.*
- *Switch off the main electric supply, if any damage is noticed to the electric equipments.*
- *If you find any breakage in the drainage system stop using latrines and do not use tap water.*
- *Do not use polluted water.*
- *Sewerage system should be checked and any damage should be repaired immediately so as to curtail spread of diseases.*
- *Empty the water clogged in the basement slowly with help of water pump so that damage to infrastructure can be minimized*
- *Check gas leakage which can be known by smell of gas or by hearing the sound of leakage; immediately open all windows and leave the house.*
- *Boil drinking water before usage and drink chlorinated water.*
- *Eat safe food.*
- *Rescue work should be undertaken immediately after flood situation as per the instruction. Do not follow any shortcut for rescue work.*
- *Do not try to leave the safe shelter to go back home until the local officials declare normalcy after flood and instruction to return home are not given.*

Tsunami:

The phenomenon Tsunami is a series of traveling ocean waves of extremely long length generated primarily by earthquakes occurring below or near the ocean floor:

Following safety measures needs to be learnt before, during and after the occurrence of tsunami:

Before

- *Be familiar with the tsunami warning signals. People living along the coast should consider an earthquake or a sizable ground rumbling as a warning signal. A noticeable rapid rise or fall in coastal waters is also a sign that a tsunami is approaching.*

- *Make sure all family members know how to respond to a tsunami. Make evacuation plans. Pick an inland location that is elevated.*
- *After an earthquake or other natural disaster, roads in and out of the vicinity may be blocked, so pick more than one evacuation route.*
- *Teach family members how and when to turn off gas, electricity, and water*
- *Children should be taught in advance about the evacuation plans*
- *Prepare emergency kit beforehand. The emergency kit should contain Flashlight and extra batteries, battery-operated radio and extra batteries, First aid kit*
- *Emergency food and water, Essential medicines etc*

During

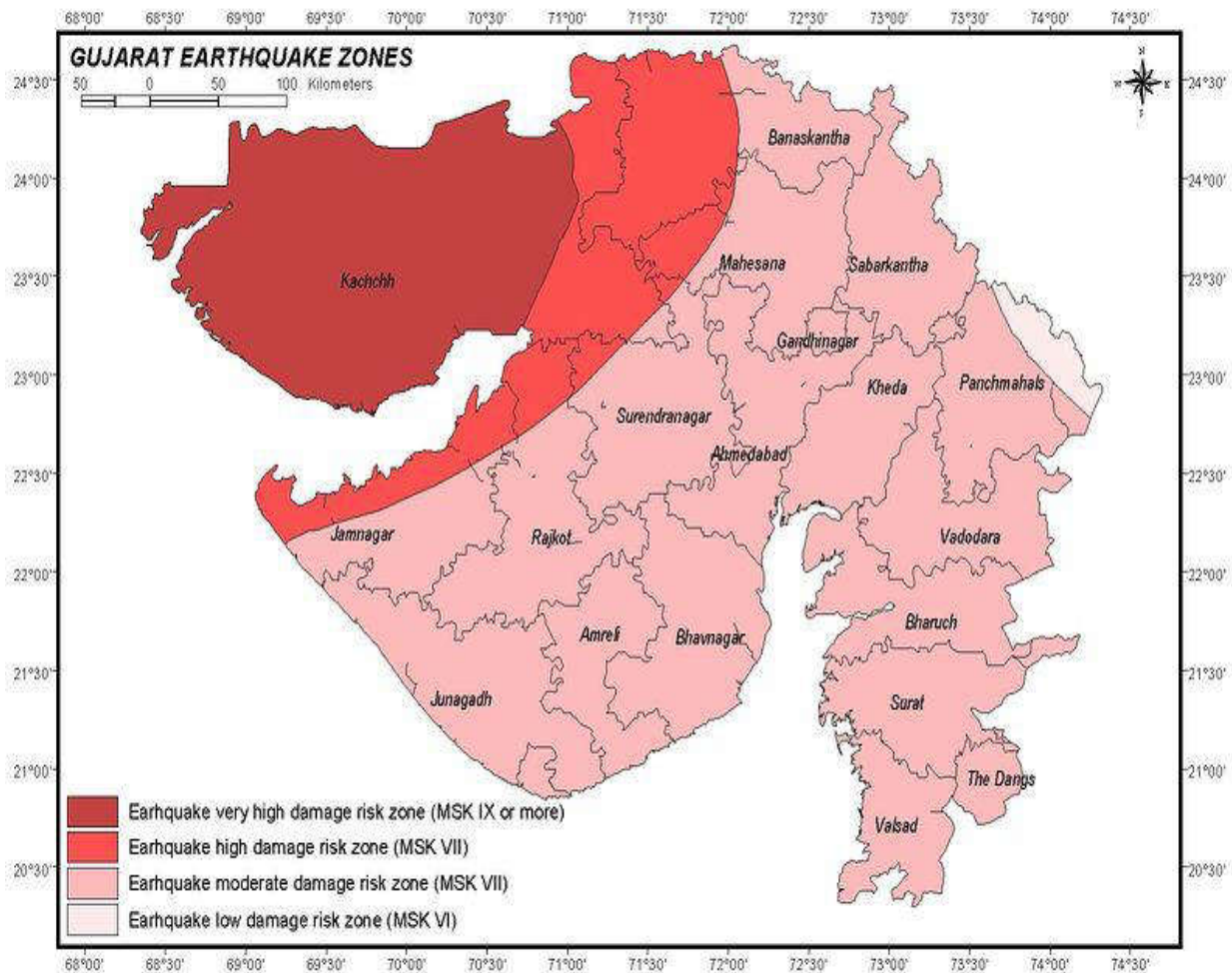
- *Listen to a radio or television to get the latest emergency information, and be ready to evacuate if asked to do so.*
- *If you hear a tsunami warning, move at once to higher ground and stay there until local authorities say it is safe to return home.*
- *Move in an orderly, calm and safe manner to the evacuation site*
- *Stay away from the beach. Never go down to the beach to watch a tsunami come in.*
- *If you can see the wave you are too close to escape it.*
- *Return home only after authorities advise it is safe to do so.*

After

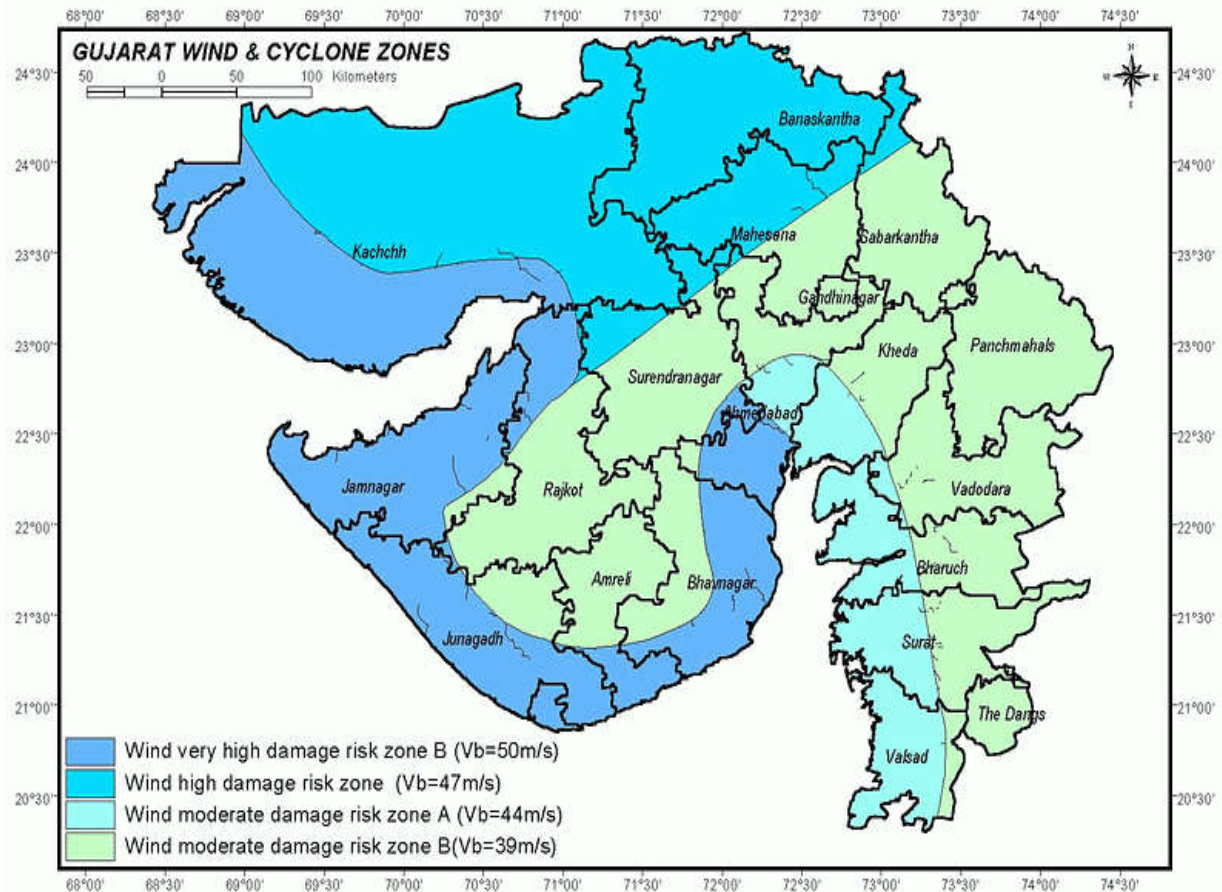
- *Stay tuned to a battery-operated radio for the latest emergency information.*
- *Help injured or trapped persons.*
- *Stay out of damaged buildings. Return home only when authorities say it is safe.*
- *Enter your home with caution. Use a flashlight/torch when entering damaged buildings. Check for electrical shorts and live wires. Do not use appliances or lights until an electrician has checked the electrical system.*
- *Open windows and doors to help dry the building.*
- *Shovel mud while it is still moist to give walls and floors an opportunity to dry.*
- *Check food supplies and test drinking water.*
- *Fresh food that has come in contact with flood waters may be contaminated and should be thrown out.*

Hazard Maps

Map Showing Gujarat Earthquake Zones



Map Showing Gujarat Wind and Cyclone Zones
Wind High Damage Risk Zone ($v_b=47\text{m/s}$)



Disclaimer: This map was collated based on the data/information compiled by the Ministry of Urban Development and Poverty Alleviation. UNDP has not verified the accuracy of information of the Map.
Source: BMTPC, India

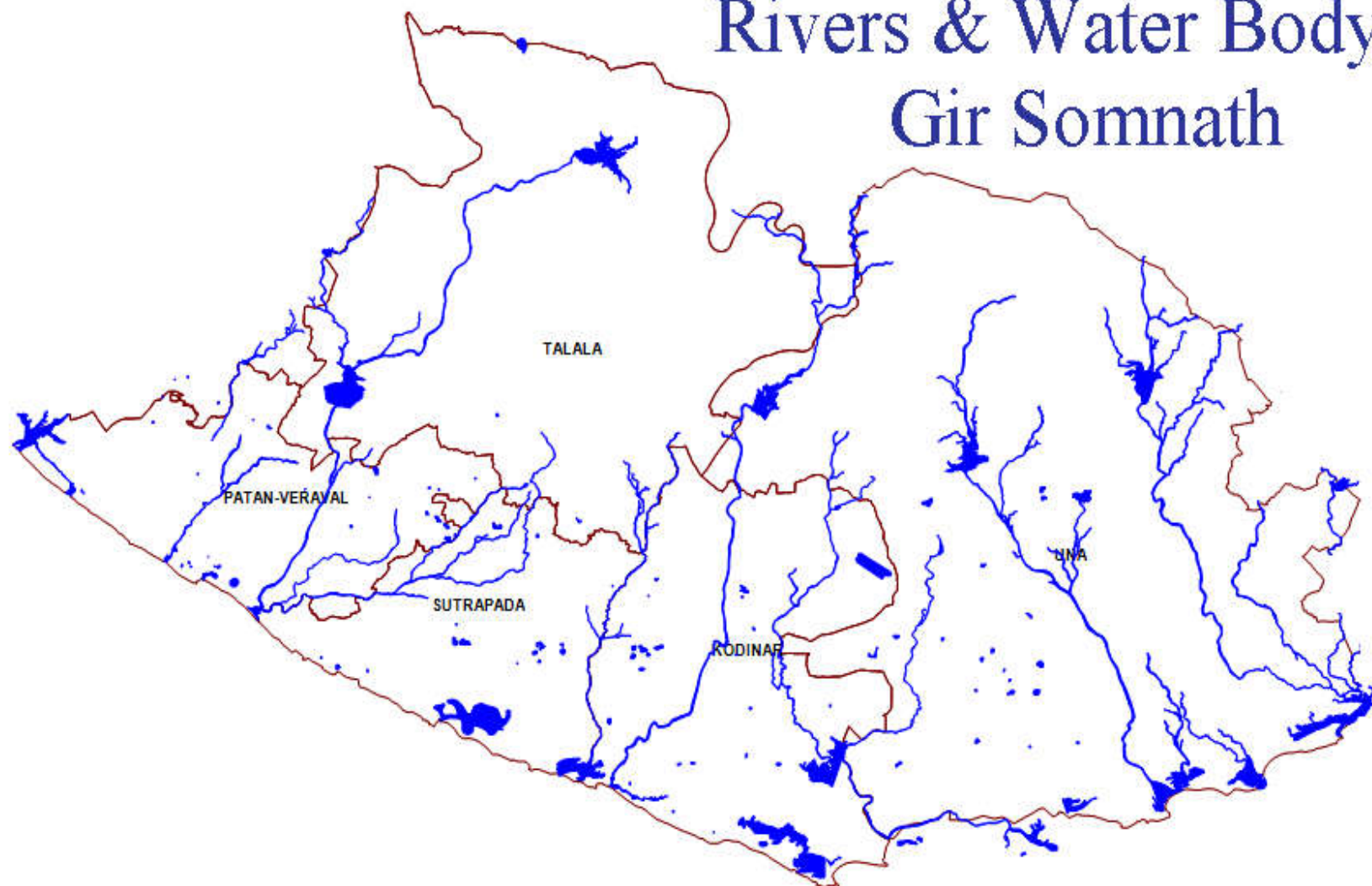
Map Showing Administrative Boundry and Network.



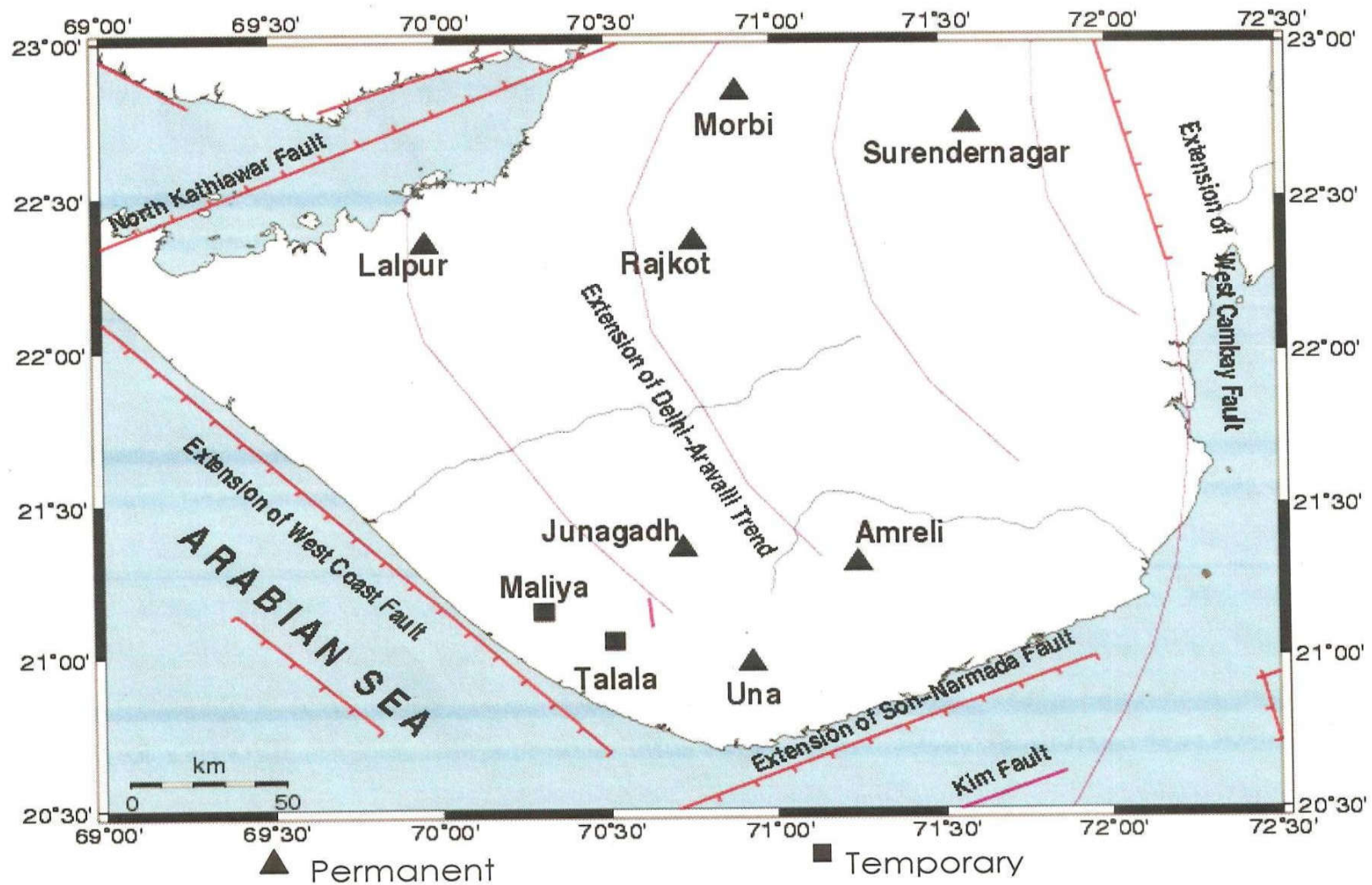


3. *Map Showing Irrigation Dams, Rivers and Water Body.*

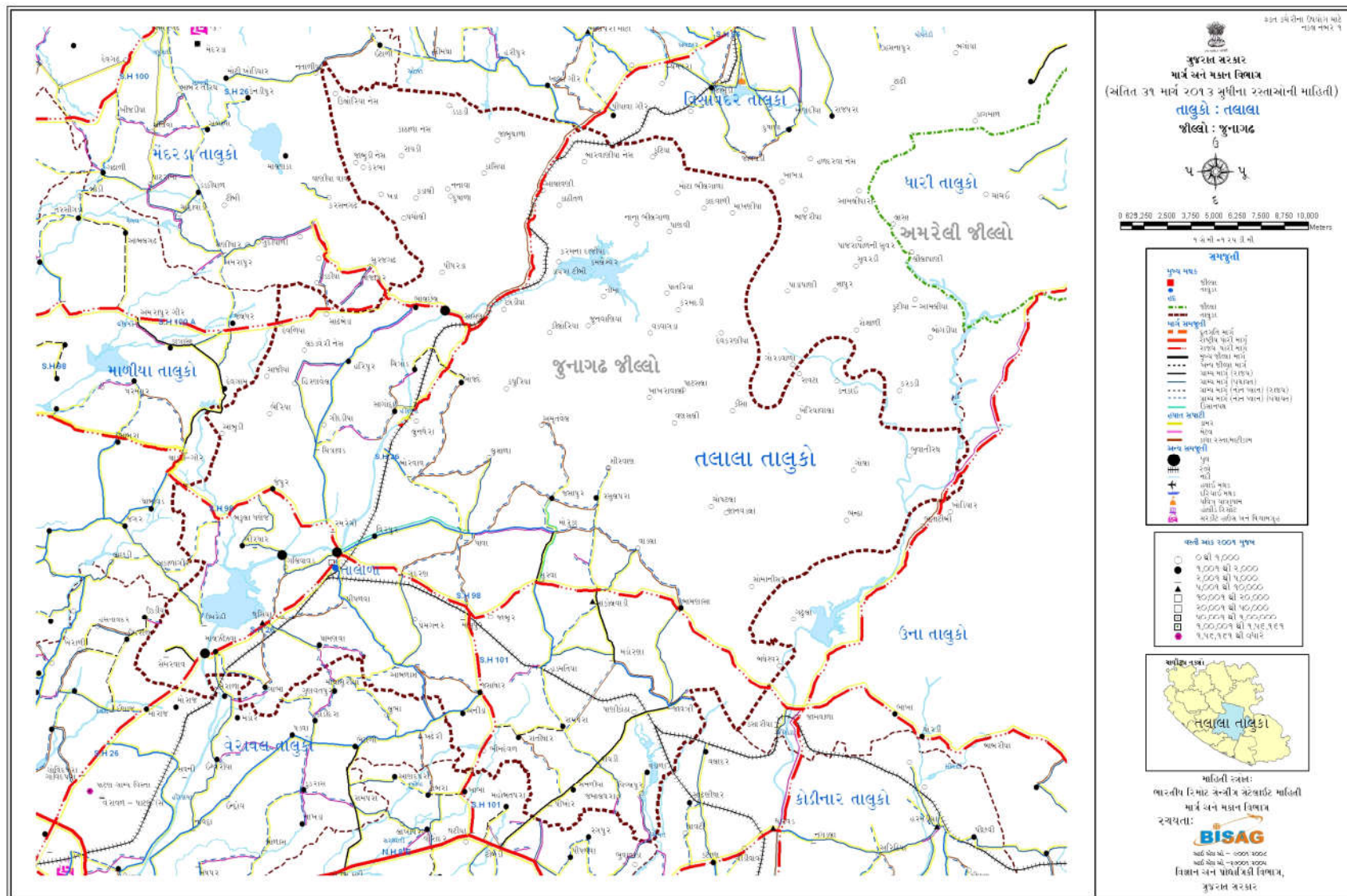
Rivers & Water Body Gir Somnath

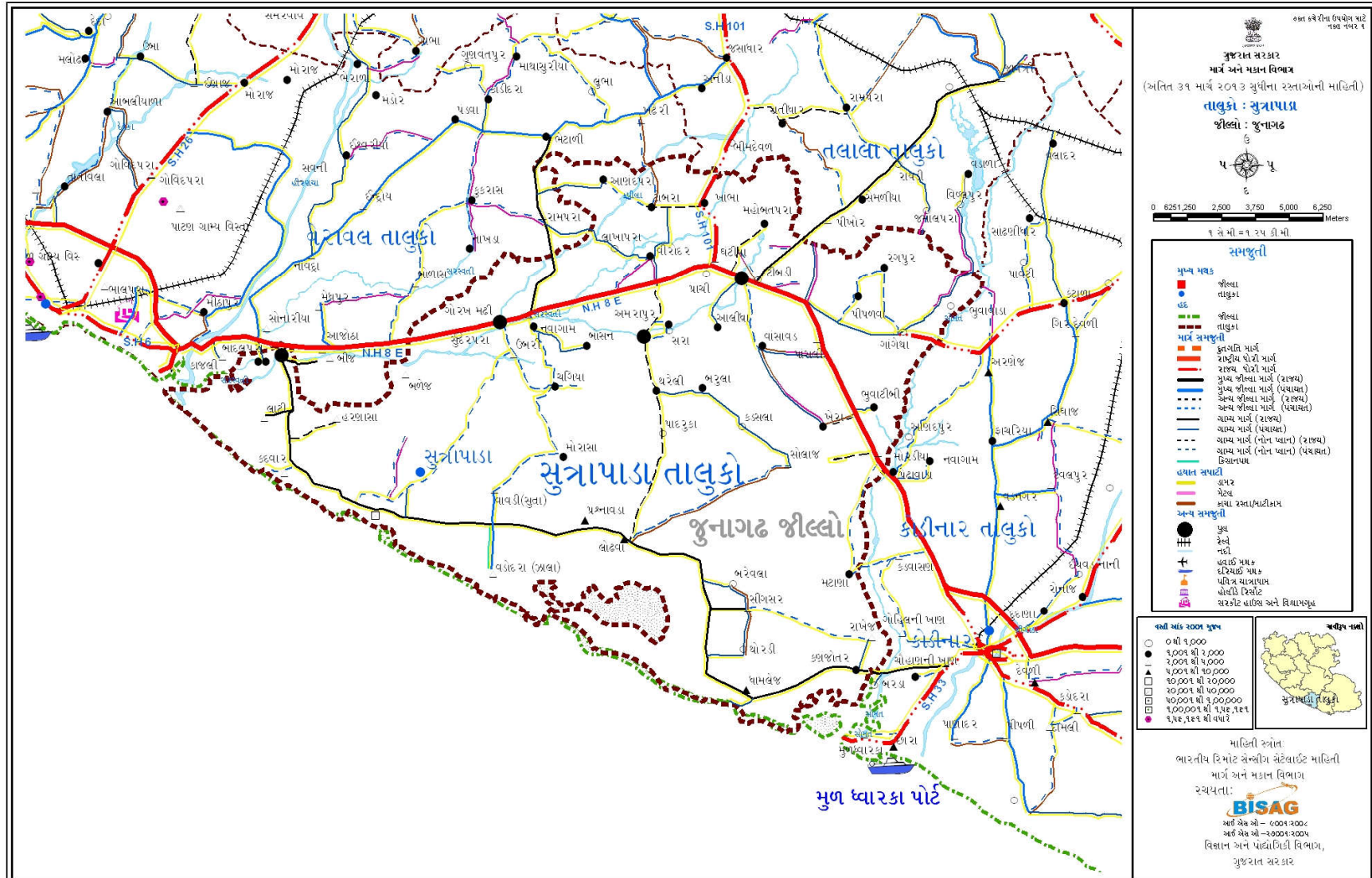


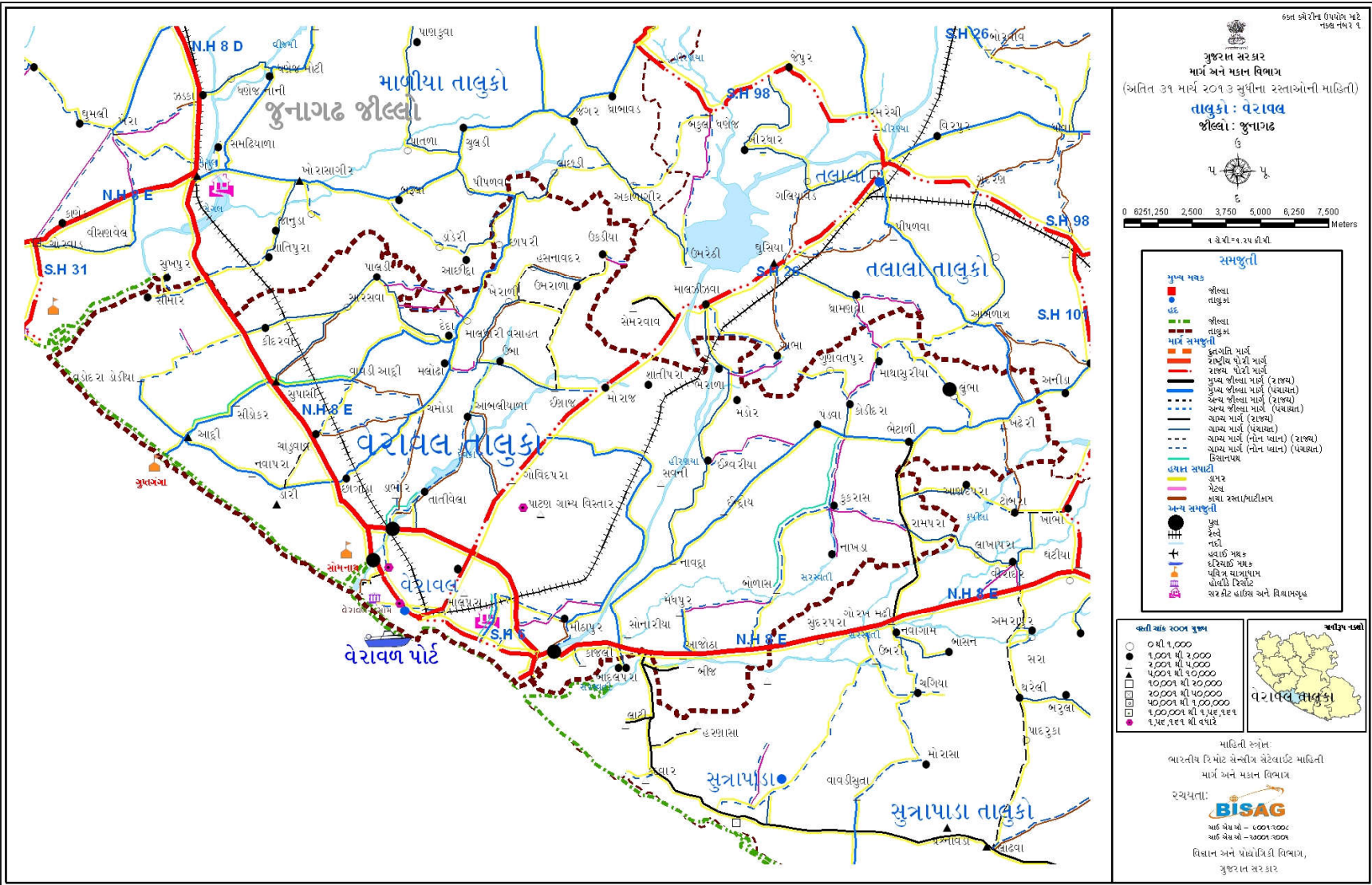
4. *Map Showing Earth Quack Fault Lines for Saurasht*

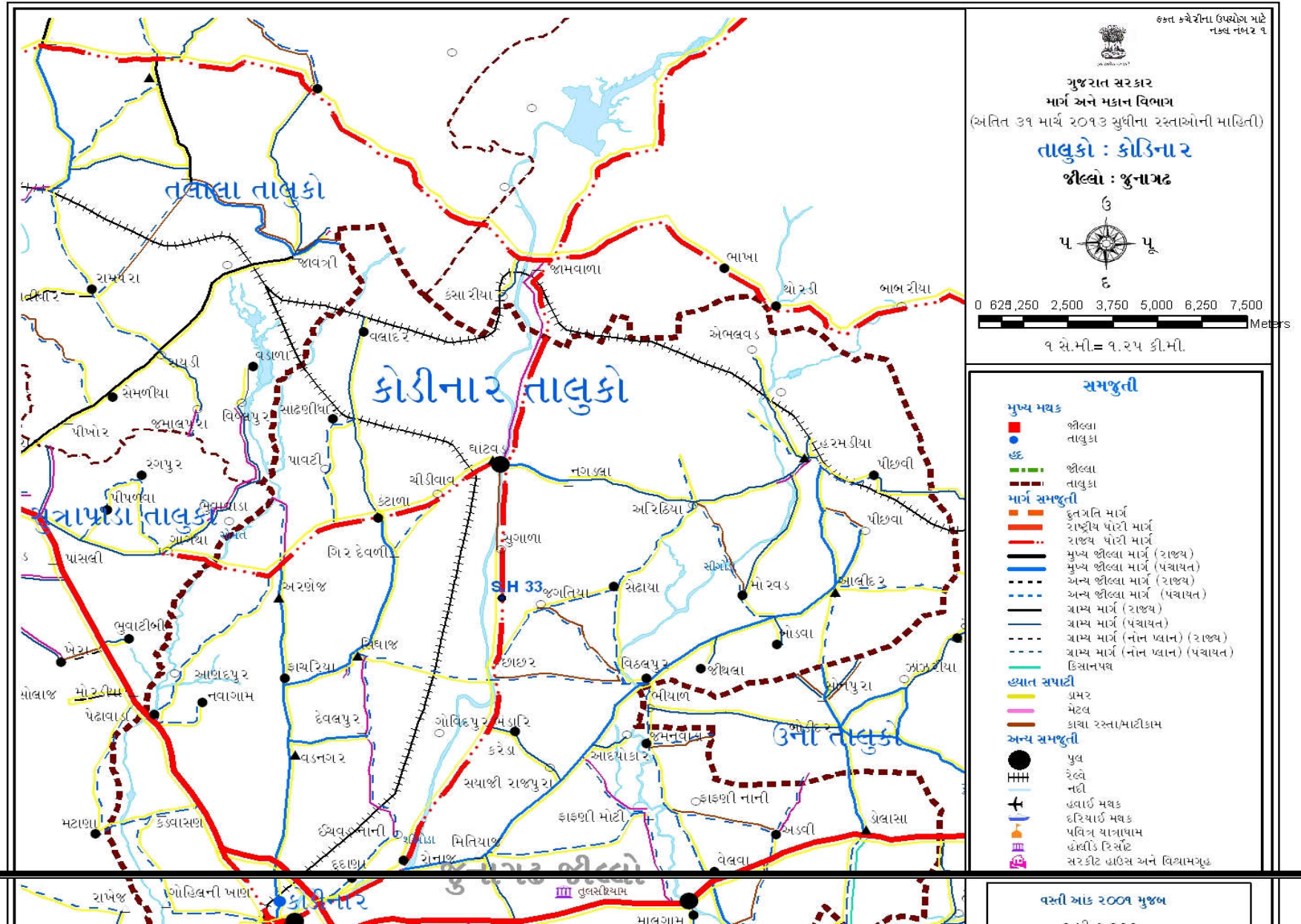


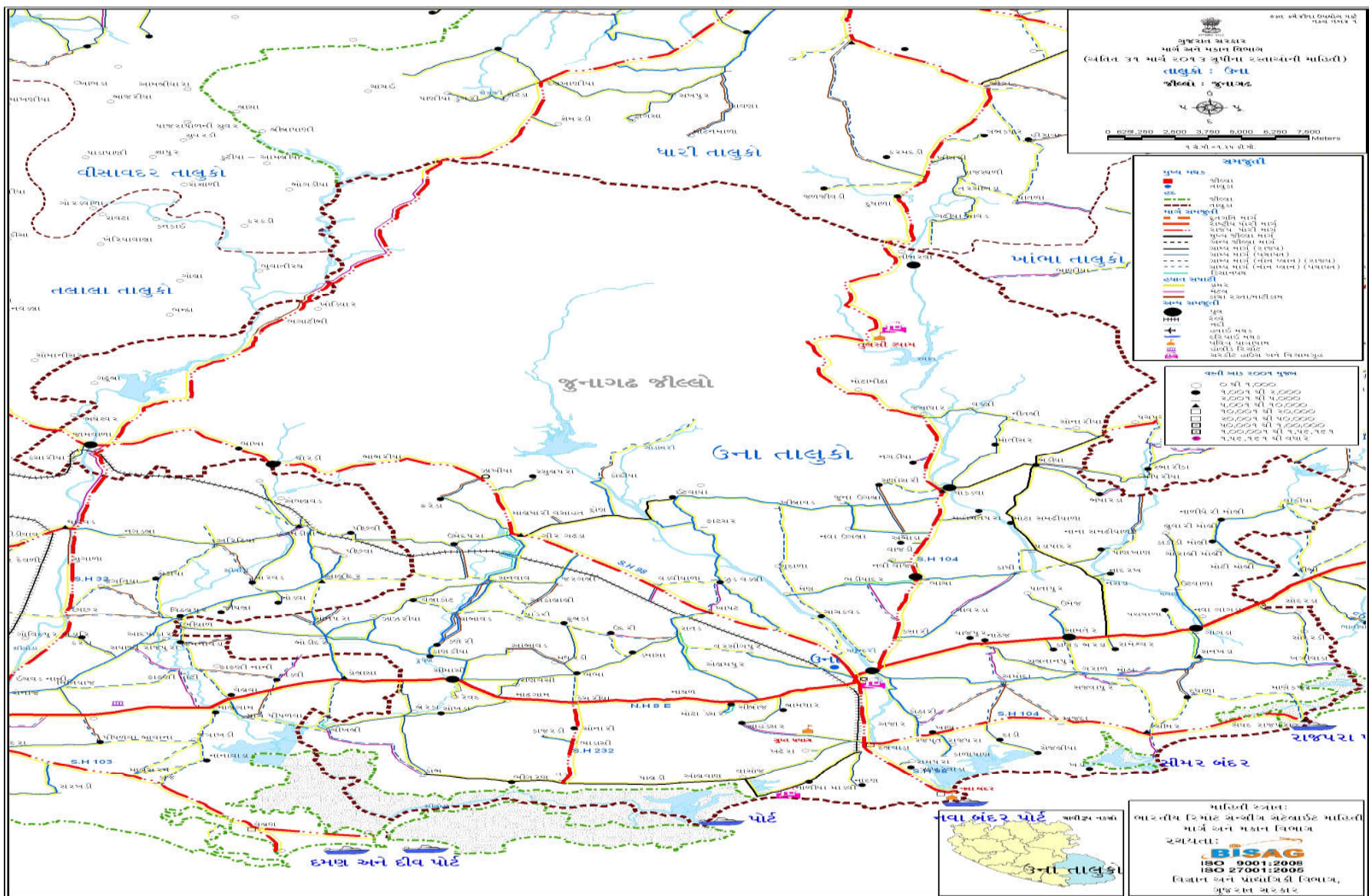












Latitude Longitude Gir Somnath District

Taluka Name	Village Name	Latitude	Longitude
KODINAR	Adpokar	20.84	70.79
KODINAR	Advi	21.81	70.83
KODINAR	Alidar	20.89	70.84
KODINAR	Anandpur	20.86	70.67
KODINAR	Arithiya	20.91	70.81
KODINAR	Arnej	20.88	70.69
KODINAR	Barda	20.78	70.65
KODINAR	Bhandariya	20.86	70.75
KODINAR	Bodva	20.87	70.83
KODINAR	Chauhan ni khan	20.78	70.67
KODINAR	Chhachhar	20.86	70.75
KODINAR	Chhara	20.74	70.71
KODINAR	Chidivav	20.91	70.74
KODINAR	Damli	20.76	70.72
KODINAR	Devalpur	20.85	70.72
KODINAR	Devli	20.78	70.71
KODINAR	Dolasa	20.82	70.85
KODINAR	Dudana	20.80	70.71
KODINAR	Fachariya	20.86	70.70
KODINAR	Fafni Moti	20.82	70.79
KODINAR	Fafni Nani	20.82	70.80
KODINAR	Ghantvad	20.92	70.75
KODINAR	Girdevli	20.90	70.72
KODINAR	Gohil ni khan	20.80	70.66
KODINAR	Govindpur Bhandariya	20.85	70.74
KODINAR	Harmadiya	20.92	70.84
KODINAR	Inchvad Nani	20.82	70.73
KODINAR	Jagatiya	20.88	70.76
KODINAR	Jamanvada	20.84	70.79
KODINAR	Jantrakhadi	20.77	70.80
KODINAR	Jithla	20.86	70.81
KODINAR	Kadodara	20.77	70.73
KODINAR	Kadvasan	20.82	70.66
KODINAR	Kaj	20.74	70.79
KODINAR	Kantala	20.91	70.72
KODINAR	Kareda	20.85	70.76
KODINAR	Kodinar (M)	20.79	70.70
KODINAR	Malgam	20.79	70.81
KODINAR	Malsaram	20.75	70.78
KODINAR	Mitiyaj	20.81	70.75
KODINAR	Morvad	20.88	70.82
KODINAR	Mota Sugala	20.90	70.75

KODINAR	Mul Dwarka	20.76	70.66
KODINAR	Nagadla	20.92	70.77
KODINAR	Nana Sugala	20.90	70.75
KODINAR	Nanavada	20.76	70.80
KODINAR	Navagam	20.85	70.67
KODINAR	Panadar	20.76	70.68
KODINAR	Panch Pipalva	20.79	70.82
KODINAR	Pavti	20.92	70.71
KODINAR	Pedhavada	20.85	70.66
KODINAR	Pichhva	20.90	70.85
KODINAR	Pichhvi	20.92	70.85
KODINAR	Pipalva Bavana	20.77	70.77
KODINAR	Pipli	20.76	70.70
KODINAR	Ronaj	20.81	70.73
KODINAR	Sandhnidhar	20.93	70.71
KODINAR	Sarkhadi	20.74	70.75
KODINAR	Sayajirajpura	20.83	70.77
KODINAR	Sedhaya	20.89	70.78
KODINAR	Singhaj	20.86	70.72
KODINAR	Sugala	20.86	70.75
KODINAR	Vadnagar	20.84	70.70
KODINAR	Valadar	20.96	70.72
KODINAR	Velan	20.71	70.82
KODINAR	Velva	20.81	70.81
KODINAR	Vithalpur	20.86	70.79
PATAN-VERAVAL	Adri	20.96	70.28
PATAN-VERAVAL	Ajotha	20.89	70.46
PATAN-VERAVAL	Ambaliyala	20.97	70.38
PATAN-VERAVAL	Badalpara	20.89	70.44
PATAN-VERAVAL	Bhalpara	20.91	70.39
PATAN-VERAVAL	Bherala	20.98	70.47
PATAN-VERAVAL	Bhetali	20.96	70.54
PATAN-VERAVAL	Bij	20.89	70.46
PATAN-VERAVAL	Bolas	20.91	70.49
PATAN-VERAVAL	Chamoda	20.97	70.36
PATAN-VERAVAL	Chanduvav	20.96	70.33
PATAN-VERAVAL	Chhapri	21.03	70.39
PATAN-VERAVAL	Chhatroda	21.95	70.34
PATAN-VERAVAL	Dabhor	21.94	70.36
PATAN-VERAVAL	Dari	20.94	70.32
PATAN-VERAVAL	Deda	20.99	70.38
PATAN-VERAVAL	Govindpara	20.95	70.40
PATAN-VERAVAL	Gunvantpur	20.98	70.51
PATAN-VERAVAL	Hasnavadar	21.02	70.41
PATAN-VERAVAL	Inaj	20.98	70.41

PATAN-VERAVAL	Indroi	20.94	70.47
PATAN-VERAVAL	Ishvariya	20.95	70.47
PATAN-VERAVAL	Kajli	20.89	70.42
PATAN-VERAVAL	Khanderi(Nani)	21.03	70.40
PATAN-VERAVAL	Khandheri	20.97	70.57
PATAN-VERAVAL	Kherali	21.01	70.40
PATAN-VERAVAL	Kindarva	21.00	70.31
PATAN-VERAVAL	Kodidara	20.97	70.52
PATAN-VERAVAL	Kukras	20.94	70.51
PATAN-VERAVAL	Lumbha	20.98	70.55
PATAN-VERAVAL	Malondha	20.98	70.37
PATAN-VERAVAL	Mandor	20.97	70.48
PATAN-VERAVAL	Mathasuriya	20.99	70.53
PATAN-VERAVAL	Meghpur	20.90	70.46
PATAN-VERAVAL	Mithapur	20.90	70.42
PATAN-VERAVAL	Moraj	20.98	70.43
PATAN-VERAVAL	Nakhada	20.92	70.51
PATAN-VERAVAL	Navadra	20.92	70.45
PATAN-VERAVAL	Navapara	20.95	70.31
PATAN-VERAVAL	Paldi	21.10	70.35
PATAN-VERAVAL	Pandva	20.97	70.50
PATAN-VERAVAL	Patan (Rural Area)	20.89	70.40
PATAN-VERAVAL	Rampara	20.93	70.53
PATAN-VERAVAL	Sarasva	21.00	70.34
PATAN-VERAVAL	Savni	20.95	70.45
PATAN-VERAVAL	Sidokar	20.97	70.30
PATAN-VERAVAL	Simar	21.01	70.27
PATAN-VERAVAL	Sonariya	21.90	70.44
PATAN-VERAVAL	Supasi	20.98	70.31
PATAN-VERAVAL	Tantivela	20.94	70.37
PATAN-VERAVAL	Ukadiya	21.02	70.43
PATAN-VERAVAL	Umba	20.99	70.39
PATAN-VERAVAL	Umrula	21.01	70.42
PATAN-VERAVAL	Vadodra Dodiya	20.98	70.27
PATAN-VERAVAL	Vavdi Adri	20.98	70.34
Patan-Veraval	Veraval	20.87	70.35
PATAN-VERAVAL	Veraval(Rural Area)	20.91	70.37
SUTRAPADA	Alidhra	20.90	70.60
SUTRAPADA	Amrapur	20.90	70.58
SUTRAPADA	Anand Para	20.95	70.56
SUTRAPADA	Barevla	20.81	70.60
SUTRAPADA	Barula	20.88	70.59
SUTRAPADA	Bhuva Timbi	20.87	70.66

SUTRAPADA	Bhuvavada	20.90	70.68
SUTRAPADA	Bosan	20.89	70.55
SUTRAPADA	Chagiya	20.88	70.54
SUTRAPADA	Dhamlej	20.77	70.61
SUTRAPADA	Gangetha	20.90	70.66
SUTRAPADA	Ghantiya	20.92	70.60
SUTRAPADA	Gorakh Madhi	20.90	70.53
SUTRAPADA	Harnasa	20.87	70.46
SUTRAPADA	Kadsala	20.88	70.61
SUTRAPADA	Kadvar	20.85	70.45
SUTRAPADA	Kanjotar	20.78	70.65
SUTRAPADA	Khalej	20.88	70.49
SUTRAPADA	Khambha	20.94	70.59
SUTRAPADA	Khera	20.86	70.64
SUTRAPADA	Lakhapara	20.92	70.56
SUTRAPADA	Lati	20.87	70.44
SUTRAPADA	Lodhva	20.83	70.57
SUTRAPADA	Mahobatpara	20.93	70.62
SUTRAPADA	Matana	20.81	70.65
SUTRAPADA	Moradiya	20.85	70.65
SUTRAPADA	Morasa	20.85	70.54
SUTRAPADA	Navagam	20.89	70.53
SUTRAPADA	Padruka	20.86	70.58
SUTRAPADA	Pipalva	20.91	70.65
SUTRAPADA	Pransli	20.89	70.63
SUTRAPADA	Prashnavda	20.83	70.55
SUTRAPADA	Rakhej	20.79	70.65
SUTRAPADA	Rangpur	20.92	70.66
SUTRAPADA	Sara	20.90	70.58
SUTRAPADA	Singsar	20.80	70.61
SUTRAPADA	Solaj	20.85	70.62
SUTRAPADA	Sundarpara	20.89	70.51
SUTRAPADA	Sutrapada	20.84	70.48
SUTRAPADA	Thareli	20.88	70.58
SUTRAPADA	Thordi	20.79	70.61
SUTRAPADA	Timbdi	20.91	70.61
SUTRAPADA	Tobra	20.94	70.57
SUTRAPADA	Umbri	20.89	70.53
SUTRAPADA	Vadodra (Jhala)	20.82	70.52
SUTRAPADA	Vansavad	20.89	70.61
SUTRAPADA	Vavdi (Sutra)	20.84	70.49
SUTRAPADA	Virodar	20.92	70.57
TALALA	Abudi	21.06	70.48
TALALA	Alavani	21.22	70.63
TALALA	Amblash	21.00	70.56

TALALA	<i>Amrutvel</i>	21.12	70.63
TALALA	<i>Anida</i>	20.98	70.59
TALALA	<i>Ankolvadi</i>	20.03	70.66
TALALA	<i>Bakula Dhanej</i>	21.07	70.47
TALALA	<i>Bamanasa</i>	21.03	70.70
TALALA	<i>Batheshvar</i>	20.96	70.75
TALALA	<i>Bhagatimbi</i>	21.03	70.82
TALALA	<i>Bhalchhel</i>	21.17	70.57
TALALA	<i>Bhanta</i>	21.03	70.80
TALALA	<i>Bheriya</i>	21.07	70.48
TALALA	<i>Bhimdeval</i>	20.96	70.60
TALALA	<i>Bhojde</i>	21.14	70.59
TALALA	<i>Bhubatirath</i>	21.07	70.81
TALALA	<i>Borvav</i>	21.09	70.56
TALALA	<i>Chhodiya</i>	21.13	70.61
TALALA	<i>Chitravad</i>	21.11	70.52
TALALA	<i>Chitrod</i>	21.14	70.57
TALALA	<i>Chopatla</i>	21.04	70.71
TALALA	<i>Dayara Timbi</i>	21.15	70.64
TALALA	<i>Dedkadi</i>	21.22	70.57
TALALA	<i>Devaliya</i>	21.16	70.50
TALALA	<i>Dhava</i>	21.06	70.59
TALALA	<i>Dhramanva</i>	21.01	70.52
TALALA	<i>Dudhala</i>	21.17	70.58
TALALA	<i>Gabha</i>	20.99	70.49
TALALA	<i>Gadhula</i>	20.98	70.76
TALALA	<i>Galiyawad</i>	21.05	70.50
TALALA	<i>Ghunsiya</i>	21.02	70.49
TALALA	<i>Gir Forest</i>	29.98	70.74
TALALA	<i>Gola</i>	21.06	70.77
TALALA	<i>Gundaran</i>	21.04	70.56
TALALA	<i>Hadmatiya</i>	21.00	70.63
TALALA	<i>Haripur</i>	21.15	70.53
TALALA	<i>Hiranvel</i>	21.14	70.51
TALALA	<i>Jamalpara</i>	20.94	70.67
TALALA	<i>Jambuthala</i>	21.25	70.61
TALALA	<i>Janvadla</i>	21.07	70.73
TALALA	<i>Jasadhar</i>	20.99	70.60
TALALA	<i>Jasapur</i>	21.08	70.64
TALALA	<i>Javantri</i>	20.98	70.70
TALALA	<i>Jepur</i>	20.08	70.50
TALALA	<i>Junvaniya</i>	21.13	70.66
TALALA	<i>Kadali</i>	21.19	70.56
TALALA	<i>Kadvali</i>	21.17	70.70
TALALA	<i>Kamleshwar</i>	21.19	70.66

TALALA	Kansiya	21.25	70.64
TALALA	Kapuriya	21.09	70.63
TALALA	Karamdadi	21.15	70.71
TALALA	Karamndajiya	21.18	70.62
TALALA	Kathital	21.20	70.65
TALALA	Kerambha	21.21	70.53
TALALA	Khada	21.19	70.54
TALALA	Khakhravala	21.11	70.64
TALALA	Kheriyavala	21.08	70.76
TALALA	Khirdhar	21.06	70.48
TALALA	Khodiyar	21.03	70.84
TALALA	Kiloriya	21.12	70.64
TALALA	Kisa	21.08	70.72
TALALA	Kutiya	21.21	70.68
TALALA	Lakadverines	21.11	70.51
TALALA	Lushala	21.10	70.60
TALALA	Madhupur Jambur	21.03	70.60
TALALA	Maljhinjhva	21.01	70.46
TALALA	Mandorna	21.00	70.67
TALALA	Moruka	21.07	70.64
TALALA	Nana Bhilgala	21.18	70.66
TALALA	Nanava	21.19	70.58
TALALA	Nima	21.13	70.65
TALALA	Pancholi	21.18	70.56
TALALA	Patariya	21.14	70.69
TALALA	Patasala	21.09	70.72
TALALA	Pikhor	20.93	70.64
TALALA	Pipalva	21.03	70.53
TALALA	Piparda	21.15	70.58
TALALA	Ramarechi	21.07	70.53
TALALA	Rampara	20.97	70.64
TALALA	Rasulpura	21.08	70.66
TALALA	Ratidhar	20.97	70.62
TALALA	Ravta	21.10	70.76
TALALA	Raydi	20.95	70.66
TALALA	Sajiya	21.10	70.49
TALALA	Sandhbeda	21.12	70.50
TALALA	Sangodra	21.12	70.56
TALALA	Sasan	21.17	70.59
TALALA	Semaliya	20.94	70.65
TALALA	Semarvav	21.00	70.44
TALALA	Shirvan	21.10	70.66
TALALA	Somanisar	21.02	70.73
TALALA	Surva	21.04	70.63
TALALA	Talala	21.05	70.52

TALALA	Umrethi	21.02	70.46
TALALA	Vadala	20.95	70.68
TALALA	Vadla	21.06	70.68
TALALA	Vadvangada	21.13	70.69
TALALA	Vansali	21.07	70.71
TALALA	Virpur	21.06	70.55
TALALA	Vithalpur	20.94	70.68
UNA	Abudi	20.82	71.14
UNA	Ambada	20.92	71.05
UNA	Ambavad	20.84	70.91
UNA	Amodra	20.81	71.09
UNA	Anjar	20.79	71.06
UNA	Ankolali	20.87	70.92
UNA	Aral	20.86	71.16
UNA	Asundrali	20.83	70.88
UNA	Babariya	20.97	70.86
UNA	Bandharda	20.95	71.12
UNA	Banej	20.82	71.02
UNA	Barwala	20.80	70.85
UNA	Bediya	20.97	71.10
UNA	Bhacha	20.89	71.06
UNA	Bhadasi	70.77	70.94
UNA	Bhadiyadar	20.88	71.03
UNA	Bhakha	20.98	70.81
UNA	Bharawala	20.78	71.11
UNA	Bhayadhar	20.79	71.15
UNA	Bhebha	20.82	70.94
UNA	Bhingrana	20.74	70.91
UNA	Bhiyal	20.85	70.79
UNA	Bhutada Hodi	20.82	70.98
UNA	Bilivali Tali	20.87	70.89
UNA	Biliyat	20.87	71.14
UNA	Biliyat Nes	20.86	71.13
UNA	Bobadiya	20.81	71.11
UNA	Bodidar	20.85	70.85
UNA	Chanchakvad	20.86	71.03
UNA	Charchock	20.85	71.17
UNA	Chhatarla	20.89	71.18
UNA	Chhela	20.81	71.18
UNA	Chhodvadi	20.89	70.95
UNA	Chikhal Kuba	20.79	71.00
UNA	Chikhli	20.78	70.85
UNA	Chorali Moli	20.91	71.17
UNA	Chuldi	20.96	71.07
UNA	Dabhala	20.84	71.15

UNA	Dal	20.79	71.19
UNA	Damacha	20.84	71.03
UNA	Damasa	20.84	70.96
UNA	Dandi	20.78	71.09
UNA	Dedakiya	20.82	71.10
UNA	Delwada	20.77	71.04
UNA	Dhokadva	20.95	71.07
UNA	Dhrabavad	20.86	70.89
UNA	Dhramaniya	20.88	70.92
UNA	DIU	20.70	70.98
UNA	Dodhi	20.82	70.87
UNA	Dron	20.93	70.94
UNA	Dudhala	20.80	71.16
UNA	Elampur	20.82	70.98
UNA	Fareda	20.94	70.89
UNA	Fatsar	20.92	70.98
UNA	Fulka	20.85	70.93
UNA	Gafagala	20.83	71.09
UNA	Gandhara	20.80	70.89
UNA	Ganesh Gali	20.84	70.93
UNA	Gangda	20.85	71.16
UNA	Garal	20.82	71.11
UNA	Ghodavadi	20.78	70.89
UNA	Ghud Jinjva	20.84	70.91
UNA	Giglani Gor	20.88	71.03
UNA	Gir Gadhada	20.92	70.91
UNA	Gola	20.89	71.03
UNA	Gundala	20.90	71.01
UNA	Gupti	20.82	70.92
UNA	Hadala	20.93	71.08
UNA	Hadkala	20.84	70.96
UNA	Itvaya	20.94	70.97
UNA	Jambuda	20.90	71.06
UNA	Jambudi	20.76	71.15
UNA	Jambupani	20.91	70.95
UNA	Jamvala	20.98	70.77
UNA	Jamvali	20.90	71.04
UNA	Jasadhar	21.00	71.06
UNA	Jenagar	20.84	70.99
UNA	Janjariya	20.86	70.86
UNA	Jaragli	20.88	70.93
UNA	Jhankharvada	20.76	71.06
UNA	Jhudvadli	20.89	70.99
UNA	Juna Ugla	20.92	71.03
UNA	Kajardi	20.78	70.92

UNA	Kakidi Moli	20.91	71.17
UNA	Kalapan	20.76	71.07
UNA	Kalipat	20.85	71.09
UNA	Kanakbarda	20.84	71.11
UNA	Kanakiya	20.83	70.88
UNA	Kandhavala	20.81	71.15
UNA	Kandhi	20.89	71.09
UNA	Kanek	20.79	70.93
UNA	Kaneri	20.84	70.89
UNA	Kansari	20.84	71.05
UNA	Kansariya	20.97	70.75
UNA	Kansvala	20.81	70.92
UNA	Kardapan	20.84	71.05
UNA	Karjadi	20.78	70.92
UNA	Kesariya	20.80	70.94
UNA	Khada	21.02	70.90
UNA	Khajudra	20.79	71.11
UNA	Khajuri	20.79	71.10
UNA	Khakharavali	20.82	71.18
UNA	Khan	20.78	71.06
UNA	Khapat	20.86	70.98
UNA	Khatriwada	20.83	71.20
UNA	Kheda	20.75	71.12
UNA	Khilavad	20.94	71.01
UNA	Kob	20.75	70.88
UNA	Kodiya	20.96	70.94
UNA	Kothari	20.79	71.06
UNA	Kothariya	20.79	70.92
UNA	Lamdhar	20.79	71.01
UNA	Lamghar	20.81	70.93
UNA	Laptni	20.87	71.15
UNA	Leria	20.83	71.01
UNA	Lerka	20.80	70.88
UNA	Lotha	20.92	71.10
UNA	Luvari Moli	20.92	71.15
UNA	Madhgam	20.80	70.91
UNA	Maghardi	20.83	70.93
UNA	Mahobatpara	20.93	71.08
UNA	Mahuda	20.86	71.04
UNA	Mandvi	20.78	70.89
UNA	Manekpur	20.81	71.19
UNA	Men	20.88	71.01
UNA	Morsupada Nes	20.75	71.10
UNA	Mota Desar	20.79	70.99
UNA	Mota Mindha	20.80	71.07

UNA	Mota Samadhiyala	20.93	71.09
UNA	Motha	20.82	71.13
UNA	Moti Moli	20.90	71.18
UNA	Motisar	20.98	71.09
UNA	Nada	20.90	70.97
UNA	Nagadiya	20.97	71.06
UNA	Naliya Mandvi	20.74	71.02
UNA	Naliyeri Moli	20.93	71.17
UNA	Nana Mindha	20.81	71.04
UNA	Nana Samadhiyala	20.92	71.14
UNA	Nandan	20.74	71.04
UNA	Nandrakh	20.89	71.13
UNA	Nathal	20.80	70.97
UNA	Nathej	20.84	70.09
UNA	Nava dedakiya	20.82	71.07
UNA	Nava Ugla	20.75	70.89
UNA	Navabandar	20.74	71.07
UNA	Nesda	20.89	71.12
UNA	Nitli	21.00	71.09
UNA	Olvan	20.75	70.97
UNA	Oyna	20.77	70.96
UNA	Padapadar	20.91	71.10
UNA	Paldi	20.75	70.96
UNA	Panderi	20.86	70.92
UNA	Pankhan	20.91	71.12
UNA	Panvadi	20.87	71.11
UNA	Pareva	20.81	70.95
UNA	Paswala	20.86	71.15
UNA	Patapur	20.87	71.10
UNA	Patla (Mahadev)	20.80	70.97
UNA	Pichhadibela	20.85	71.12
UNA	Piliyo Dhuno	20.85	71.01
UNA	Rajasthali	20.81	70.84
UNA	Rajput Rajpara	20.77	71.07
UNA	Rameshvar	20.84	71.13
UNA	Rampara	20.76	71.05
UNA	Ranvasi	20.81	70.91
UNA	Rasulpara	20.96	70.92
UNA	Ratad	20.85	70.97
UNA	Revad	20.80	70.89
UNA	Saiyad Rajpara	20.79	71.20
UNA	Sakra	20.81	70.80
UNA	Samter	20.85	71.12
UNA	Sanakhda	20.84	71.16

UNA	Sanjavapur	20.81	71.13
UNA	Sanosri	20.95	71.05
UNA	Sanvav	20.89	70.91
UNA	Sapnes	20.95	71.09
UNA	Sarkadiya	20.76	70.99
UNA	Senjaliya	20.77	71.10
UNA	Shahdesar	20.78	71.00
UNA	Siloj	20.80	70.99
UNA	Simar	20.78	71.14
UNA	Simasi	20.82	70.89
UNA	Sokhda	20.79	70.89
UNA	Sonari	20.78	70.94
UNA	Sonariya	20.99	71.12
UNA	Sondarda	20.86	71.19
UNA	Sondardi	20.85	71.20
UNA	Sonpura	20.86	70.84
UNA	Sudavi	20.88	71.16
UNA	Sultanpur	21.17	70.16
UNA	Tad	20.75	70.93
UNA	Tadhodiya	20.78	70.98
UNA	Tadi	20.88	70.98
UNA	Tapakeshvar	20.74	71.09
UNA	Thordi	20.97	70.83
UNA	Timbarva	20.88	71.10
UNA	Tulsishyam	21.05	71.02
UNA	Ugla	20.94	71.03
UNA	Ujjadiya	20.79	70.89
UNA	Umarvidi	20.84	71.12
UNA	Umedpara	20.91	70.89
UNA	Umej	20.87	71.11
UNA	Una (M)	20.81	71.04
UNA	Undarari	20.85	70.95
UNA	Untwala	20.88	71.15
UNA	Vadli	21.01	71.08
UNA	Vadviyala	20.88	70.96
UNA	Vagha Timbi	20.87	71.10
UNA	Vajdi	20.90	71.05
UNA	Vakumba (Karjadi)	20.94	71.11
UNA	Vakumbha (Dhramani)	20.89	71.01
UNA	Vakumbha (Tadi)	20.91Latitude	70.92
UNA	Vaniagali	20.92	71.05
UNA	Vankajambu	20.68	70.92
UNA	Vankidas	20.87	71.05
UNA	Vankiya	20.94	71.19

UNA				Vansoj	21.06	70.91
UNA				Vanzara	20.74	71.00
UNA				Varsingpur	20.83	71.00
UNA				Vavarda	20.86	71.07
UNA				Velakot	20.87	70.88
UNA	Viragali	20.79	70.93			
UNA	Yajpur	20.84	71.08			

