# **Gujarat State Disaster Management Policy (GSDMP)**

Gujarat State Disaster Management Authority

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#### Overview

#### **Need for a Policy**

The state of Gujarat ('the state') has been prone to disasters. Over the years, these disasters have caused extensive damage to life and property and have adversely impacted economic development. The Government of Gujarat ('GoG') recognises the need to have a proactive, comprehensive, and sustained approach to disaster management to reduce the detrimental effects of disasters on overall socio-economic development of the state. GoG believes that there is a need for a policy that articulates its vision and strategy for disaster management in the state. In this context the Gujarat State Disaster Management Authority (GSDMA) provides guidelines to various entities involved in disaster management in the state to discharge their responsibilities more effectively. With this in view, the GSDMA has formulated the Gujarat State Disaster Management Policy ('GSDMP' or 'the Policy').

#### Aim

The aim of the Gujarat State Disaster Management Policy is establishing 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 the state of Gujarat 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.

#### **Objectives**

- ?? To assess the risks and vulnerabilities associated with various disasters;
- ?? To develop appropriate disaster prevention and mitigation strategies;
- ?? To provide clarity on roles and responsibilities for all stakeholders concerned with disaster management so that disasters can be managed more effectively;
- ?? To develop and maintain arrangements for accessing resources, equipment, supplies and funding in preparation for disasters that might occur;
- ?? To ensure that arrangements are in place to mobilize the resources and capability for relief, rehabilitation, reconstruction and recovery from disasters;
- ?? To create awareness and preparedness and provide advice and training to the agencies involved in disaster management and to the community;
- ?? To strengthen the capacities of the community and establish and maintain effective systems for responding to disasters;
- ?? To ensure co-ordination with agencies related to disaster management in other Indian states and those at the national and international level:

- ?? To ensure relief/assistance to the affected without any discrimination of caste, creed, community or sex.
- ?? To establish and maintain a proactive programme of risk reduction, this programme being implemented through existing sectoral and inter-sectoral development programmes and being part of the overall development process in the state;
- ?? To develop and implement programmes for risk sharing and risk transfer for all types of disasters.
- ?? To address gender issues in disaster management with special thrust on empowerment of women towards long term disaster mitigation.
- ?? To develop disaster management as a distinct management discipline and creation of a systematic and streamlined disaster management cadre.

#### **Key elements of the Gujarat State Disaster Management Policy**

- ?? GoG will have the prerogative to define the occurrence of a disaster and define the boundaries of the disaster-affected site by issuing a "disaster declaration". The declaration can be made on the recommendation of SRC or DC.
- ?? GoG views disaster management as a long-term process that involves the creation of disaster management and mitigation capacity in the state, in addition to developing systems and processes designed to provide relief and rehabilitation.
- ?? The establishment of the Gujarat State Disaster Management Authority ('GSDMA' or 'the Authority') as a nodal agency is an important element in the overall framework for disaster management in the state. GSDMA will facilitate, co-ordinate and monitor work for mitigation and preparedness for disasters. It will also coordinate and monitor emergency relief measures, relief, reconstruction and rehabilitation. The Authority would be provided with statutory powers in its role, as per the proposed Gujarat State Disaster Management Act, 2002.
- ?? The Revenue Department, through the offices of the State Relief Commissioner and the District Collectors along with relevant Government departments will be responsible for implementing emergency relief measures and relief after a disaster. GSDMA will facilitate, co-ordinate and monitor the activities related to disaster management of the Revenue Department and other relevant Government Departments, where necessary.
- ?? State Relief Commissioner and District Collectors will be provided special powers to deal with emergency situations created by disasters. When a disaster impacts an area covering several towns and cities within a district, the Government personnel and their facilities shall be placed under the operational control of the respective District Collector for the duration of the emergency. Government departments will simplify procedures to mobilize resources in these emergency situations.
- ?? Development planning will incorporate disaster management principles as an integral part of the overall planning process.
- ?? GoG will look at all aspects of risk sharing and risk transfer to ensure that the costs associated with managing disasters are distributed across a wider population.

- ?? Links will be established between the nodal agency (GSDMA), Government departments, local authorities, NGOs, research agencies, public sector, private sector, community groups and other stakeholders to share knowledge, establish coordination mechanisms and augment capacity of all the stakeholders.
- ?? A mechanism of continuous feedback shall be instituted so that learnings can be translated into more effective relief, rehabilitation and reconstruction efforts and the process of capacity creation and relief, rehabilitation and reconstruction feed into each other.
- ?? Self-reliance shall be developed by promoting and encouraging the spirit of self-help and mutual assistance among local authorities and constituents.
- ?? All administrative subdivisions of the state will develop and maintain documented plans of their disaster management functions and activities.
- ?? To ensure that all responsible agencies, their staff and the public are familiar with policy, plans and procedures related to disaster management, periodic exercises and drills shall be conducted at all levels, with specific emphasis at the district and local levels.

#### Key responsibilities

- ?? Responsibility for the declaration of a disaster at any level in the state rests with State Government. The declaration can be made on the recommendation of the State Relief Commissioner ('SRC') or a District Collector ('DC').
- ?? Responsibility for initiation and execution of emergency relief measures and relief in times of disasters rests with state Revenue Department, in conjunction with other relevant Government departments. The state Revenue Department shall act through its functionaries at the state level (the State Relief Commissioner) and the district level (the District Collector).
- ?? Responsibility for facilitation, coordination and monitoring of the development and implementation of reconstruction and rehabilitation activity following disasters rests with GSDMA, utilizing the resources and expertise of relevant Government departments, district administration, local authorities, non-governmental organizations ('NGOs'), the public sector, the private sector, international development agencies, donors and the community.
- ?? Responsibility for coordinating the development, implementation, review and maintenance of disaster management plans and programmes rests with GSDMA, utilising the resources and expertise of relevant Government departments, district administration, local authorities, NGOs, the public sector, the private sector, international development agencies, donors and the community.

Responsibility for coordination and monitoring of the programmes of risk reduction rests with GSDMA. Responsibility for initiation and implementation of the risk reduction programme rests with the relevant Government departments, NGOs, the private sector and the community.

#### 1 Introduction

- 1.1 The state of Gujarat has been prone to disasters. These disasters have caused extensive damage to life and property and have adversely impacted economic development. Examples include the persistent droughts in the state and the devastating earthquake that hit Gujarat on January 26, 2001. In response to this, the Government of Gujarat has decided to formulate a policy that addresses various aspects of management of these disasters in a systematic and sustained manner.
- 1.2 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 (droughts, floods, earthquakes, cyclones etc.) and manmade (oil spills, forest fires, chemical catastrophes etc.) causes. This policy takes full cognizance of other related policies and initiatives at both the national and state level. In particular, this policy is intended to be consistent with the disaster management policy at the national level.
- 1.3 In order to achieve its objective of institutionalising a disaster management ('DM') framework in the state, the GoG has established a nodal agency, namely the Gujarat State Disaster Management Authority, to facilitate, coordinate and monitor disaster management activities and promote good disaster management and mitigation practices in the state. The establishment of the GSDMA is a key element in the overall disaster management policy of the State Government. The GoG also proposes to introduce legislation in the form of a Gujarat State Disaster Management Act to provide a legal framework for disaster management in the state.
- 1.4 GoG acknowledges its responsibility to proactively manage disasters. Hence, this policy document articulates GoG's vision and strategy for managing disasters proactively, systematically and in a sustainable manner. The document also provides guidelines to various entities involved in disaster management in the state for discharging their responsibilities more effectively.

#### 2 Principles for Disaster Management

#### 2.1 Principles of Gujarat State Disaster Management Policy ('GSDMP')

Disaster management is not a separate sector or discipline but an approach to solving problems relating to disasters impacting any sector - agricultural, industrial, environmental, social etc. Ultimately, disaster management is the responsibility of all sectors, all organisations and all agencies that may be potentially affected by a disaster. Utilising existing resources ensures efficiency in resource utilisation and lower costs.

With this background in mind, GoG has outlined a set of key principles that will guide the development and implementation of the DM policy in Gujarat. These principles are designed to provide guidance during all phases of disaster management and are consistent with internationally accepted best practices.

#### 2.1.1 Integrating disaster management into development planning

The objectives of the DM policy or any sectoral policy should sub-serve the overall goals of the state relating to economic and social development. Hence, policies on sustainable development should seek to reduce possible losses from disasters, as a matter of course. In other words, disaster prevention and preparedness should be an integral part of every development policy. Therefore, the state's development strategy shall explicitly address disaster management as an integral part of medium and long-term planning, especially for disaster prone districts in the state.

#### 2.1.2 Multi-hazard approach to disasters

The GoG recognises that disasters can either be man-made, natural or even arising out of technological causes. Although the preparedness for long-gestation disasters such as droughts is fairly adequate in the state, the existing DM framework needs to be augmented to meet the needs in the aftermath of unexpected and large-scale disasters such as cyclone and earthquake. A robust DM policy must therefore provide, plan and prepare for all types of hazards and disasters that may be reasonably expected to occur in a region.

#### 2.1.3 Sustainable and continuous approach

One of the objectives of sustainable development is to increase the inherent strength of all agencies, including the community to deal with disaster situations. Achieving this objective requires sustained initiatives encompassing social, economic and infrastructure issues. Further, once capacity is built, it must be sustained and this would

be an ongoing and continuous activity. The Government of Gujarat aims to improve on a continuous and sustainable basis, the infrastructure and processes for relief, rehabilitation and reconstruction and institutionalise capacity building at all levels within the state in order to be able to mitigate the impact of disasters.

#### 2.1.4 Leverage existing Government machinery

The GoG shall strive to ensure that the long-term approach to disaster management utilises the existing administrative machinery of the State Government at all levels within the state in order to undertake communication, capacity creation, relief, rehabilitation and reconstruction, information collection and dissemination and sharing of disaster management best practices. All Government departments, bureaus, corporations, authorities and agencies are encouraged to utilise all available resources within their respective areas for disaster management before seeking assistance from entities in other areas or higher authorities. New institutions may be established where the existing mechanisms are found inadequate.

#### 2.1.5 Effective inter-agency co-operation and co-ordination

Successful disaster response requires a quick and organised response. The active participation of affected communities, NGOs, private sector and various Government departments like Fire Brigade, Police, Health etc. is thus critical to any response activity. Therefore, the DM policy in Gujarat shall focus on establishing response mechanisms that are quick, co-ordinated and participative.

#### 2.1.6 Capacity building

Managing disasters using only a handful of stakeholders would be inefficient. The Government of Gujarat therefore recognises that the DM policy will need to strengthen the resilience and capacity of NGOs, private sector and the local community to cope with disasters while simultaneously building the capacity of the Government machinery to manage disasters. Effective disaster management requires that the community especially vulnerable groups like women, landless labour etc. be fully aware of the extent of their vulnerability to disasters to reduce its impact, prior to its actual occurrence. Further, NGOs, private sector and the community must understand and be familiar with DM principles and practices, what their own responsibilities are, how they can help prevent disasters, how they must react during a disaster and what they can do to support themselves and relief workers, when necessary. Training is an integral component of capacity building. Development of Disaster Management as a distinct managerial discipline will be taken up to create a systematic and streamlined disaster management cadre. Gender issues in disaster management will be addressed and the empowerment of women towards long term disaster mitigation will be focused upon.

#### 2.1.7 Autonomy and equity

Disasters are catastrophic events whose impact is felt across socio-economic boundaries. Consequently, any DM effort should be neutral and non-discriminatory. To that extent, it is necessary that the DM institutions possess the autonomy to make decisions in a fair, scientific and systematic manner. Disaster assistance and relief must also be provided in an equitable and consistent manner without regard to economic or social status of beneficiaries. Relief / assistance must be provided without any discrimination of caste, creed, religion, community or sex.

#### 2.1.8 Legal sanction

The institutions/ individuals responsible for implementing disaster-management activities must have the necessary legal sanction and validity with requisite powers for managing emergency situations. This is necessary to ensure that they are recognised by all stakeholders as the legitimate policy making and/or implementation authorities. The GoG aims to create a legal framework that incorporates the roles of all relevant institutions responsible for managing disasters through the proposed Gujarat State Disaster Management Act, 2002.

#### 2.1.9 Accommodating aspirations of people

The objective of any effort relating to disaster management is to benefit the community. People are central to the decision-making process for disaster management and their priorities should be reflected in the programmes undertaken.

#### 2.1.10 Accommodating local conditions

Disaster management efforts should be sensitive to local customs, beliefs, and practices and be adapted to local conditions. In addition, changes in the community and evolving social and economic relationships must be borne in mind to avoid confrontation and bottlenecks. This will ensure participation of the local community and foster a culture of joint responsibility for disaster management at all levels.

#### 2.1.11 Financial sustainability

GoG is committed to allocating funds in the long term to ensure the sustainability of disaster management effort. One of the key elements in ensuring the long-term sustenance and permanency of the organisation is the manner in which funds would be generated and deployed on an ongoing basis. This is necessary in view of GoG's focus on disaster mitigation.

#### 2.1.12 Cost sharing and cost recovery

The GoG encourages citizens and Government agencies to proactively enhance their capacity to deal with disasters. It is not possible for the GoG to bear all the costs of disasters on a sustainable basis, or provide rehabilitation on a long-term basis. The

long-term approach is to move towards spreading the risks through various risk transfer mechanisms and incentivising individuals and other entities to protect their interests through insurance. However, in doing so, GoG would seek to protect the interests of poorer sections of the society through appropriate mechanisms.

#### 2.1.13 Develop, share and disseminate knowledge

No single organisation can claim to possess all the capabilities required to provide effective disaster management. The disaster management entities within Gujarat will typically network with a number of other entities to augment their capabilities. In addition, an institute dedicated to conducting research, development and training activities related to disaster management, shall be set up in the state. This institute would aid in the sharing and dissemination of specialised knowledge related to disaster management among various implementation agencies, NGOs, private sector and the community in the state. Also, basic concepts related to disaster management and the role of the community therein shall be included in the curriculum of schools. This shall serve to sensitise people to the participative approach needed for effective disaster management. Information and knowledge embracing all facets of disaster- from mitigation to amelioration - shall be infused in schools, colleges and teacher's training syllabi.

## 3 Gujarat State Disaster Management Policy - Approach and Strategy

The Gujarat State Disaster Management Policy considers the understanding of hazards and disasters, their behavior, and the risks they pose to the community as fundamental to achieving successful disaster management. Thus, the strategy for implementing the GSDMP emphasises an integrated approach to disaster management, covering the following phases of managing disasters as essential components of any disaster management program:

- ?? Pre-disaster Phase
- ?? Disaster/ Impact Phase
- ?? Post-disaster Phase

In order to carry out the prescribed activities contained within this policy, the GoG has defined a framework of operation for a set of agencies that play a key role in disaster management. The GSDMP envisages a DM framework where the following entities play significant roles:

- ?? Gujarat State Disaster Management Authority;
- ?? State Relief Commissioner;
- ?? Government Departments;
- ?? District Administration, headed by the District Collector;
- ?? Local Authorities, including Municipal Corporations, District, Talukas, Gram Panchayats etc.;
- ?? Voluntary agencies, including NGOs;
- ?? Public sector,
- ?? Private sector:
- ?? Community

The implementation framework is based on the premise that disaster management is not a separate sector or discipline but an approach to solving problems that facilitates disaster management, harnessing the skills and resources across stakeholders. Therefore, a key element of the policy framework is to leverage the resources and capability of existing entities and build new capabilities, wherever necessary. While for most activities, the implementation agencies remain the local authorities and Government functionaries, at the state level, GSDMA provides the overall direction and guidance that keeps the focus of various entities on disaster management.

#### Approach and strategy for Implementation

#### 3.1 Phase I: Pre-Disaster Phase – Prevention, Mitigation & Preparedness

The pre-disaster phase includes prevention, mitigation, and preparedness activities. These activities involve extensive data collection, maintaining directories of resources, developing action plans, capacity building, training and community awareness activities, among others. Government departments, district administration, local authorities and other relevant agencies will develop plans for prevention and mitigation of disasters and will build capacity and ensure preparedness in the event of a disaster actually taking place. The private sector, NGOs and the community would actively co-operate with the relevant agencies and would participate in training and other activities, conducted to augment their disaster management capabilities. In this context, GSDMA will act as the nodal agency for mitigation, preparedness and capacity creation and would facilitate and monitor the same. GSDMA will develop linkages with other stakeholders such as lending agencies, Government departments, local authorities, NGOs, private sector and community groups, national and international agencies in order to share knowledge and augment capacity on a holistic basis. The capabilities developed in this phase will play a critical role in all subsequent phases.

#### 3.1.1 Key Activities in Pre-Disaster Phase

The following are the primary activities that will be carried out in this phase:

- ?? Planned development: There is a significant relationship in the way disasters and development affect each other. A long-term disaster management approach requires that planning activities for development should include robust mitigation practices. GoG would ensure that the planning activities of the state administration and local authorities take into account disaster risks and provide for suitable preventive and mitigation measures.
- ?? Development of policies and guidelines: Effective disaster management requires the formulation of clear guidelines and subsequent compliance by all Government authorities, private sector entities and the public at large. GoG would develop appropriate guidelines that would include:
  - ?? Civil/ architectural/ structural/ land use planning specifications;
  - ?? Other guidelines specific to disaster type, like quarantine (epidemic), cropping patterns (flood), evacuation (flood/ cyclone) etc.;
  - ?? Development of laws/ by laws that assist the implementation of a framework for disaster management.
- ?? Establishing a proper chain of command: It is imperative that a clear chain of command is established for effectively managing activities that immediately follow a disaster. The GoG will establish a clear chain of command with GSDMA as the nodal agency for all disaster management activities and coordination mechanisms across all entities responsible for implementation in the state.

- ?? Risk assessment: Before commencing preventive and preparedness activities, it is important to identify and assess different types of risks for the state or parts of the state. Relevant departments would co-ordinate with GSDMA for a thorough assessment of:
  - ?? Hazards: Classification of the region into zones based on hazard potential; and
  - ?? Vulnerability: Assessment of degree of vulnerability of any given structure/people / region to the impact of the hazard.

The assessment will be used for developing detailed contingency plans and mitigation measures.

- ?? Develop disaster management plans: Detailed disaster management plans that are tailored to local needs would enable the relevant authorities and the community to respond systematically and effectively to disasters. The guidelines for such plans will be prepared by stakeholders like Government departments, district administration, local authorities and expert agencies etc., in consultation with GSDMA. The relevant authorities will prepare plans using these guidelines and ensure that these are constantly reviewed and updated. Existing procedure manuals viz. Relief Manuals and Flood Memorandum etc. would be reviewed and updated by the relevant Government department, under the overall guidance of the Authority. In addition, GSDMA and the relevant Government departments will prepare, and constantly update, a master contingency plan for the state based on the local plans. All District Collectors shall, in advance, designate evacuation areas for use in emergencies and define plans for providing essential services to those areas, when in use.
- ?? Develop repositories of information: It is critical that the relevant authorities should be in a position to quickly establish contact with people and resources in the aftermath of a disaster. GSDMA and the relevant Government departments will ensure that a comprehensive repository of information such as names, contact details, etc. is created, maintained and made easily accessible to the relevant authorities at all times.
- ?? Establish communication and technology networks: A robust state-wide information network is critical not only for managing disasters but also for effective functioning of the state government. Hence, the GoG will ensure that a comprehensive information network is available. This network must enable timely collection of hazard-related information and rapid dissemination of relevant information and warnings. GoG, in conjunction with GSDMA, will ensure that appropriate levels of redundancies are built into the network from a disaster perspective.
- ?? Developing early warning mechanisms: Early warning mechanisms help the relevant authorities in taking timely preventive measures and thereby, reduce the damage caused by disasters. Wherever possible, the relevant authorities, in conjunction with Government departments, shall set up early warning mechanisms to give advance warning for hazards like cyclones, floods etc. This shall include the

- setting up of Regional Response Centres, if necessary, for providing key early warning information and preparing for a response, in the event of occurrence of disaster. GSDMA shall ensure that these mechanisms are aligned with the overall disaster management plan for the state.
- ?? Establish flexible procedures: Emergency situations may warrant simplified procedures for decisions relating to evacuation, procurement of essentials, deployment of resources and such other activities. The relevant Government departments shall accordingly define flexible procedures for emergency situations.
- ?? Building capabilities & expertise: It is necessary to build strong capabilities and expertise for handling various aspects of disasters. GSDMA shall network with a number of entities such as disaster management agencies, research institutions, disaster management specialists, NGOs, community groups, line departments, local Government authorities and other stakeholders to augment the capabilities of all relevant entities. In addition, GoG would set up an institute dedicated to conducting research, development and training activities related to disaster management in the state. This institute would aid in the sharing and dissemination of specialised knowledge related to disaster management among various implementation agencies, NGOs, private sector and the community in the state. This institute will develop disaster management as a distinct management discipline for streamlined disaster management cadre.
- ?? **Capacity building:** The capacity of a community to withstand disasters is a function of :
  - ?? awareness of the risks associated with disasters;
  - ?? understanding of appropriate responses to disasters;
  - ?? possessing the capacity to respond (training, research, availability of resources, skilled cadres);
  - ?? setting up emergency response mechanisms that mobilise and deploy these trained resources in a quick, efficient and systematic manner.

Hence, GSDMA and the relevant authorities shall ensure that the required awareness, resources and training are provided to the community. The community will also be urged to develop self-reliance by promoting and encouraging the spirit of self-help and mutual assistance. GSDMA shall support these initiatives by providing necessary resources and expertise from time to time. Also, basic concepts related to disaster management and the role of the community therein shall be included in the curriculum of schools. This shall serve to sensitise people to the participative approach needed for effective disaster management. GSDMA and the relevant Government departments shall ensure that personnel in specialised areas (medical care, rescue etc.) are adequately trained and available for deployment in emergency situations. Disaster management capacity building will have special thrust on empowering women towards long-term disaster mitigation

?? Health and medical care: Health and medical care is one of the most critical and immediate response component in any disaster response situation. The capacity for

- providing medical assistance in disaster situation including the emergency response quality will be developed through trained personnel and appropriate infrastructure.
- ?? Knowledge management: The experience from previous disaster situations can provide valuable insights in managing disasters. It is vital that these learnings be captured in a systematic manner and utilised through knowledge management systems, feedback mechanisms etc. GSDMA and relevant authorities shall develop systems and processes that enable knowledge management by capturing, storing and effectively utilising information related to previous experience in disaster management. Information and knowledge embracing all facets of disasters from prevention to amelioration shall be disseminated in schools and colleges.
- ?? Funds generation: Disasters can cause extensive strain on financial resources because of relief, reconstruction and rehabilitation activities. In addition, activities relating to mitigation of and preparedness for disaster situations require funds. GoG intends to have a budgetary allocation for disaster management. Further, funds would be made available through the Calamity Relief Fund. In addition, GSDMA, as nodal agency, would also identify alternative sources of funds for activities related to disaster management in the state.
- ?? Identifying avenues for risk sharing and transfer: Risk sharing or risk transfer is a means of transferring a part of the disaster risk to a third party, which is willing to indemnify the beneficiary against the disaster for a specified premium. GoG would explore innovative means of sharing the costs associated with disasters through risk sharing, risk transfer and other measures since this would alleviate the burden on the state exchequer. This could be done through tax surcharge levies, imposition of local taxes, beneficiary funding, disaster insurance, micro finance and loans, bonds, tax saving schemes linked to disaster relief investments etc.

#### 3.1.2 Pre-disaster Phase – Roles of relevant agencies

The Gujarat State Disaster Management Authority

The Authority, in close co-ordination and with assistance of relevant Government departments would:

- ?? Develop, maintain and update the Gujarat State Disaster Management Policy;
- ?? Develop risk assessment programme and emergency plans that focus on disaster preparedness and mitigation;
- ?? Establish an effective disaster management structure that can compile, implement and monitor plans, as per the state policy;
- ?? Incorporate disaster reduction, prevention and mitigation in socio-economic development planning;
- ?? Give recognition to and ensure that district administration and local authorities are able to enforce safety standards and rules, and strengthen their institutional capacity to deal with disasters and implement disaster management plans;

- ?? Streamline the development, implementation and maintenance of contingency plans, and ensure that lifeline support systems are in place or enhanced;
- ?? Enhance the existing capacity to limit damage by improving surveillance and early warning systems;
- ?? Facilitate in establishment of an enabling legislative and financial framework for disaster management, with due attention to the role of the different tiers of Government, the private sector and individuals;
- ?? Develop and implement educational and information programmes to raise public awareness with special emphasis on risk reduction and preparation;
- ?? Stimulate the active involvement of the community, local groups, women, and disabled people in disaster management programmes with a view to facilitating the capacity of the community to deal with disasters;
- ?? Promote and support research, development of new technologies and the use of local knowledge in measures that are aimed at supporting risk reduction and relate to disaster management activities;
- ?? Ensure that regional and international experience, knowledge and resources are made available to support efforts in risk reduction and disaster management in the state.

#### Government departments

Government departments must ensure adequate assistance to GSDMA, the district administration and local authorities for activities in this phase. These departments should ensure their active co-operation in setting up communication centers, drawing up contingency plans, assisting in capacity building, developing plans, gathering data, and identifying and training appropriate personnel, under the overall direction of GSDMA.

#### District Collectors

The DC plays a co-ordinating role at the district level to ensure that the various Government functionaries in the district effectively carry out the DM activities in this phase. Working in close co-operation with Government departments and local bodies, the roles of DCs in this phase include:

- ?? Ensuring that prevention, mitigation and preparedness activities are carried out in accordance with the appropriate guidelines;
- ?? Providing inputs to GSDMA relating to various aspects of disaster management, including early warnings, status of preparedness etc.
- ?? Ensuring that relevant officials in the district possess the knowledge to deal with disaster management issues;
- ?? Developing an appropriate relief implementation strategy for the district, taking into account the unique circumstances of the district and prevailing gaps in institutional capacity and resources of the district:

- ?? Facilitating and co-ordinating with local Government bodies to ensure that predisaster DM activities in the district are carried out optimally;
- ?? Facilitating community training, awareness programmes and the installation of emergency facilities with the support of local administration, NGOs, and the private sector;
- ?? Establishing adequate inter-department coordination on issues related to disaster management;
- ?? Reviewing emergency plans and guidelines;
- ?? Involving the community in the planning and development process;
- ?? Ensuring that local authorities, including Municipal Corporations, Gram Panchayats etc. in the district, are involved in developing their own mitigation strategies;
- ?? Ensuring appropriate linkage between DM activities and planning activities;
- ?? Revisiting/ reassessing contingency plans related to disaster management;
- ?? Ensuring that proper communications systems are in place, and contingency plans maximize the involvement of local agencies;
- ?? Ensuring that DM related equipment, especially fire-fighting equipment are well-maintained and ready to use.

#### Local Authorities

Local authorities should work in close co-ordination with and provide all assistance to relevant Government departments, under the overall guidance of DC or GSDMA. They should ensure that staff is adequately trained and all necessary resources are in a ready-to-use state. They would also be responsible for ensuring compliance to all specifications, as may be stipulated by Government departments or GSDMA, for structures under their jurisdiction.

#### Private Sector

The private sector should ensure their active participation in the pre-disaster activities in alignment with the overall plan developed by the GSDMA or the DC. They should also adhere to the relevant building codes and other specifications, as may be stipulated by relevant local authorities.

#### Community Groups and Voluntary agencies

Local community groups and voluntary agencies including NGOs should actively assist in prevention and mitigation activities under the overall direction and supervision of the GSDMA or the DC. They should actively participate in all training activities as may be organised and should familiarise themselves with their role in disaster management.

#### 3.2 Phase II: Impact Phase -Emergency Relief Measures and Relief

This phase includes all measures that are taken immediately in the aftermath of a disaster. The speed and efficiency of the response in this phase will crucially determine the loss to life and property. The ability of the state to respond to a disaster will be developed during the pre-disaster phase and the capabilities and institutions developed therein will be brought into play in this phase. Equally important will be the deployment of trained personnel, proper flow of information and speed of decision making.

The Revenue Department, in conjunction with other relevant Government departments would carry out activities in this phase. GSDMA will facilitate, co-ordinate and monitor the activities in this phase, wherever required. In case GSDMA believes that adequate relief is not being provided, it will be entitled to direct the SRC or the DC in taking requisite measures. The district administration headed by the DC, in conjunction with local authorities, shall be responsible for carrying out relief activities when the impact of a disaster is restricted within the geographical boundaries of a district. The SRC shall coordinate and support relief activities of district administrations, where a disaster has affected more than one district. Recognizing the importance of a clear chain of command in emergencies, the GoG will provide the SRC and DCs special powers to coordinate the activities of all Government authorities within their jurisdiction.

#### 3.2.1 Key Activities in Impact Phase

The following are the primary activities that need to be carried out as part of emergency relief measures and in the relief phase to implement the policy guidelines:

- ?? Search & Rescue: The first priority in the aftermath of a disaster is to minimise loss of lives by undertaking rescue efforts for the affected people and providing medical treatment. People who are trapped under destroyed buildings or are isolated due to floods or cyclones need immediate assistance. The District Collector, in conjunction with local authorities will be responsible for the search and rescue operations in an affected region. In doing so, the DC will be guided by relevant disaster management plans and will be supported by Government departments and local authorities.
- ?? Subsistence, shelter, health and sanitation: Disasters can disrupt food supply, water supply and sanitation mechanisms. They may also force people to abandon their houses, either temporarily or permanently. Such situations typically result in an immediate need for shelter and protection against an incidence of epidemic. The relevant Government departments and local authorities would provide temporary shelter, health and sanitation services to rescued victims in order to prevent an outbreak of disease.
- ?? Infrastructure and essential services: Disasters can cripple the infrastructure of the state in terms of roads, public buildings, airfields, ports, communication network etc. An immediate priority after a disaster is to bring the basic infrastructure into operating condition and deal with fires and other hazardous conditions that may exist

- in the aftermath of the disaster. The local authorities would work in close coordination with relevant Government departments like R&B, Police etc. to restore infrastructure to normal operating condition.
- ?? Security: Usually, in a disaster situation, the police and security personnel are preoccupied with conducting search and rescue missions. Some people could take advantage of the situation and resort to looting and other anti-social activities. Consequently, it is necessary that security agencies functioning under the administrative control of the district authorities be geared to prevent this and provide a sense of security to citizens. SRC and DCs may invoke special powers vested in him/ her by GoG, if existing powers regarding the same are inadequate.
- ?? Communication: The SRC, the district administration and local authorities would communicate to the larger community the impact of the disaster and specific activities that are being or need to be undertaken to minimize the impact. Some of these activities could include:
  - ?? Media management/ PR: To ensure precise communication of the impact of disaster and relief measures being taken and generate goodwill among community and other stakeholders;
  - ?? Community management: This includes communicating to the affected communities with a view to preventing panic reactions, while providing relevant information and handling welfare enquiries;
  - ?? Feedback mechanisms: Using various mechanisms, including the communication network to get feedback on relief measures and urgent needs of various agencies involved in emergency relief measures and relief.
- ?? Preliminary damage assessment: In the aftermath of a disaster, the district administration and local authorities receive simultaneous requests for assistance from scores of people and the resources at the disposal of the local administration are over-stretched. Hence, it is necessary to utilize and deploy the resources in the most efficient manner. Such deployment is not possible without undertaking a preliminary damage assessment. Once a disaster strikes, the Government departments and the local authorities shall carry out a preliminary 'need and loss assessment' and the district administration shall mobilize resources accordingly.
- ?? Funds generation: The GoG allocates funds in the state Budget for relief activities. In addition, funds may be available through the Calamity Relief Fund. However, these funds may not be adequate to meet disaster management requirements in the aftermath of large-scale disasters like the January 2001 earthquake in the state. In such circumstances, the GoG shall explore additional sources of funding through aid, grants, loans etc., as identified in the pre-disaster phase.
- ?? Finalizing relief payouts and packages: Relief packages shall be customized, if required, to the specifics of the disaster by the GoG. Relief packages would include details relating to collection, allocation and disbursal of funds to the affected people. Relief would be provided all the affected families without any discrimination of caste, creed, religion, community or sex whatsoever.

?? Post-relief assessment: GSDMA, with assistance from Government departments, district administration and local authorities will document learning from the relief experience, which can be inputs into further mitigation, relief or rehabilitation and reconstruction plans.

#### 3.2.2 Impact Phase - Roles of relevant agencies

Emergency relief measures and relief in the immediate aftermath of a disaster is primarily carried out under the supervision of the Revenue Department. As far as possible, the relevant Government departments and district administration shall carry out their functions in accordance with the appropriate action plan developed under the guidance of GSDMA.

#### The Gujarat State Disaster Management Authority:

The Authority shall develop policies and principles that guide and govern the emergency relief measures and relief in this phase. The Authority would also facilitate, co-ordinate and monitor emergency relief measures and relief being carried out by relevant agencies, if required, in this phase, GSDMA would:

- ?? Recommend provision of additional powers to the implementation agencies to coordinate and handle emergency relief measures and relief, if existing powers are inadequate;
- ?? Facilitate, co-ordinate and monitor emergency relief measures and relief efforts of implementation agencies;
- ?? Co-ordinate with agencies of other states and other national and international agencies, if necessary, to augment the relief being provided;
- ?? Ensure effective implementation of policy guidelines by providing guidance to implementing agencies from time to time.

#### The State Relief Commissioner

The SRC plays a direct and active role in relief. For a disaster that impacts more than one district in the state, the SRC leads the relief efforts using the appropriate action plan. The SRC, either directly or through the respective District Collectors, co-ordinates and monitors the relief efforts using all the resources available with the State Government. In this phase, the SRC would:

- ?? Recommend to the State Government when disaster needs to be declared;
- ?? Supervise and undertake relief, if necessary, where disaster is declared;
- ?? Support the DC in carrying out emergency relief measures in respective districts.

#### Government Departments

Functionaries of various Government departments will carry out relief operations as per disaster management plans developed, under the overall supervision of the SRC and

the DCs. The respective district heads from the various Government departments shall report to the District Collector for the activities in this phase.

#### District Collectors

In this phase, the DC is responsible for all activities related to disaster management for his/her district, including the following:

- ?? Recommend to the State Government, declaration of disaster;
- ?? Undertake and supervise emergency relief measures and relief operations in the district, with assistance of other relevant Government departments, local authorities, voluntary agencies, community groups etc.;
- ?? Assess need for additional resources and coordinate with the SRC and GSDMA for accessing statewide resources, if required.

#### Local Authorities

Local Authorities, including Municipal Corporations, Municipalities, District, Taluka, and Gram Panchayats etc. would follow appropriate guidelines and procedures in undertaking emergency relief measures and relief activities, under the overall supervision and direction of the SRC or the DC.

#### Private Sector

The private sector would participate in the emergency relief measures and relief activities under the overall supervision and direction of the SRC or the DC. Based on the training and other capacity-building inputs received from GSDMA and other authorities, they should be able to mobilise resources immediately and commence emergency relief measures and relief at the earliest, if required. They should also actively provide relevant information regarding magnitude of effect of disaster, need for additional resources etc. They should also co-operate with relevant authorities in the conduct of a preliminary damage assessment etc.

#### Community Groups and Voluntary agencies

Local community and voluntary agencies including NGOs are usually the first-responders in the aftermath of a disaster. The community and voluntary agencies should undertake rescue and relief measures immediately, to the extent possible on their own, before the district or the state administration steps-in. After the intervention of the district or state administration they should continue the works of rescue and relief under the overall direction and supervision of the SRC or the DC. They should work in close coordination with DC/SRC to avoid duplication and ensure equity. They should take a pro-active role in assisting the victims of disaster and should provide inputs to relevant authorities as to the magnitude of effect of disaster, need for additional resources etc. They should also co-operate with relevant authorities in the conduct of a preliminary damage assessment etc.

#### 3.3 Phase III: Post-Disaster Phase – Reconstruction & Rehabilitation

The thrust of Government policy in this phase will be to ensure a speedy return to normalcy and mitigation of long-term consequences of the disaster. The policy objective of the Government in this phase will be to focus on economic and social consequences of the disaster and directing efforts to improve the same. The policy objectives will be carried out through the machinery of the state as well as with the aid of other stakeholders with whom long-term relationships have been developed in the pre-disaster phase.

#### 3.3.1 Key Activities in Post-Disaster Phase

The following activities would be carried out in this phase to achieve policy objectives:

- ?? Detailed damage assessment: While a preliminary damage assessment is carried out during the impact phase, a detailed assessment must be conducted before commencing reconstruction and rehabilitation activities. The relevant Government departments and local authorities shall initiate detailed assessment at their respective level for damages sustained in housing, industry/ services, infrastructure, agriculture, health/ education assets in the affected regions.
- ?? Assistance to restore houses and dwelling units: GoG may, if needed, will formulate a policy of assistance to help the affected to restore damaged houses and dwellings. This should neither be treated as compensation for damage nor as an automatic entitlement.
- ?? Relocation (need based): The GoG believes that need-based considerations and not extraneous factors drive relocation of people. The local authorities, in consultation with the people affected and under the guidance of GSDMA, shall determine relocation needs taking into account criteria relevant to the nature of the calamity and the extent of damage. Relocation efforts will include activities like:
  - ?? Gaining consent of the affected population;
  - ?? Land acquisition;
  - ?? Urban/ rural land use planning;
  - ?? Customizing relocation packages;
  - ?? Obtaining due legal clearances for relocation;
  - ?? Getting the necessary authorization for rehabilitation;
  - ?? Livelihood rehabilitation measures for relocated communities, wherever necessary.
- ?? Finalizing reconstruction & rehabilitation plan: The effectiveness of any reconstruction and rehabilitation is based on detailed planning and careful monitoring of the relevant projects. GSDMA will oversee reconstruction and rehabilitation work and ensure that it takes into account the overall development plans for the state. GSDMA will approve reconstruction and rehabilitation projects based on:
  - ?? Identification of suitable projects by relevant departments;

- ?? Project detailing and approval by the relevant technical authority.
- ?? Funds generation: Reconstruction & rehabilitation projects are fairly resource intensive. These projects have been financed in the past primarily through the state exchequer. In the recent past, funds have also been raised from international agencies. GoG shall finalise the fund generation mechanism, including the covenants and measures that govern fund inflow and disbursement and usage. This includes:
  - ?? Estimation of funds required based on detailed damage assessment reports and consolidation of the same under sectoral and regional heads;
  - ?? Contracting with funding agencies and evolving detailed operating procedures for fund flow and corresponding covenants.
- ?? Funds disbursement and audit: The funds raised from funding agencies are usually accompanied by stringent disbursement and usage restrictions. It is therefore important to monitor the disbursement of such funds to ensure that none of the covenants are breached. GSDMA, in conjunction with relevant agencies, shall monitor disbursal of funds by:
  - ?? Prioritizing resource allocation across approved projects;
  - ?? Establishing mechanisms (like a chain of banks, collection centres, nature of accounts, spread etc) for collection of funds;
  - ?? Ongoing monitoring and control of fund usage throughout actual project implementation.
- ?? Project management: Since rehabilitation and reconstruction effort typically involves the co-ordinated efforts of several entities, the GoG shall encourage the respective entities to strengthen program management capabilities to ensure that synergies across and within entities are managed efficiently. In addition, it is also necessary to constantly monitor the activity to ensure that the project is executed on time, in accordance with the technical specifications and to the satisfaction of the beneficiaries. GSDMA, in conjunction with relevant Government departments, will monitor the reconstruction activity that is carried out by various implementation agencies. Typical implementation activities would include:
  - ?? Disaster proofing and retrofitting of houses;
  - ?? Creation/ Retrofitting of structures including roads, bridges, dams, canals etc that may have been destroyed/ damaged due to the disaster;
  - ?? Restoration of basic infrastructure facilities, for example, ports, airports, power stations etc.;
  - ?? Creation of health centres, first aid centres, hospitals, groups of doctors and surgeons etc.;
  - ?? Restoration of the industrial viability of the affected area.;
  - ?? Restoration of livelihood.
- ?? **Communication:** Communication activities are necessary to convey to the larger community the scope and nature of the proposed reconstruction and rehabilitation effort so as to increase the stakeholder awareness and buy-in for the ongoing

activities. Hence, GSDMA and relevant Government departments, district administration and local authorities shall undertake:

- ?? Ongoing media management/ Public Relations: To ensure accurate communication of the reconstruction and rehabilitation measures being taken to various stakeholders;
- ?? Community management: This includes communicating to the affected communities with a view to appraising them of efforts being made for their relocation/ rehabilitation/ reconstruction;
- ?? Feedback mechanisms: Using the communication network to get feedback on reconstruction and rehabilitation measures.
- ?? Dispute resolution mechanisms: GSDMA, in conjunction with relevant agencies, shall institutionalize mechanisms to address beneficiary grievances at various levels, as well as explore innovative ways of dispute minimisation like involving the community in reconstruction initiatives. Appropriate mechanism with penalties for dealing with false claims will be evolved to prevent misuse of assistance.
- ?? Implementing initiatives for recovery of reconstruction costs: The GoG shall finalise and implement select recovery measures such as:
  - ?? Imposing tax surcharge levies (central);
  - ?? Imposing local taxes;
  - ?? Facilitation of funding responsibility sharing by beneficiaries etc.

#### 3.3.2 Post-Disaster Phase - Roles of relevant agencies

The post-disaster phase will mainly comprise reconstruction and rehabilitation activities. Currently, the activities in this phase are primarily carried out by the local bodies (Gram Panchayats, District, Taluka, Municipal Corporations, Municipalities etc.) and various Government departments and boards. However, their activities in this phase shall be in accordance with the reconstruction and rehabilitation plans framed by GSDMA, in conjunction with implementing authorities.

#### The Gujarat State Disaster Management Authority:

The Authority shall through the line departments / local bodies conduct a detailed assessment of damage, formulate estimates of financial support required and raising the required funds from various Governments, national and international funding agencies etc. The Authority would be responsible for the deployment of funds, as per identified priorities. The Authority would facilitate, co-ordinate and monitor reconstruction and rehabilitation efforts of various Government departments and other implementation agencies in terms of project timelines, processes, funds deployment and benefits accruing to the affected community. As part of the same, the Authority would also be responsible for meeting the guidelines and providing feedback on various parameters related to the progress and outcome of the reconstruction and rehabilitation efforts to the various funding agencies and other stakeholders.

#### Government departments and Local Authorities

Government departments and local authorities will conduct detailed damage assessment and will carry out the reconstruction and rehabilitation activities, in accordance with the policies and guidelines specified by the Authority. They would also be responsible for reporting various parameters, as may be required by GSDMA, related to the progress and outcome of the various projects undertaken by them.

#### **District Collectors**

The DC plays a co-ordinating role at the district level to ensure that the various Government departments effectively carry out the rehabilitation and reconstruction activities in this phase. The primary responsibilities of the DC in this phase are:

- ?? Coordinating the reconstruction and rehabilitation efforts in the district or a part of the district;
- ?? Assisting GSDMA in monitoring the progress and outcome of reconstruction and rehabilitation efforts on the basis of the mechanisms established by GSDMA.

#### Private Sector

The private sector should provide fair estimates of damage assessment to relevant authorities and provide feedback in terms of their priorities and concerns for work related to rehabilitation and reconstruction. They should participate in the post-disaster activities, in co-ordination with GSDMA or the DC and in alignment with the overall policies and guidelines developed by the Authority. They should co-operate in providing feedback regarding progress and outcome of rehabilitation and reconstruction projects undertaken in their vicinity.

#### Community Groups and Voluntary agencies

Community groups and voluntary agencies, including NGOs should provide fair estimates of damage assessment to relevant authorities and provide feedback in terms of their priorities and concerns for work related to rehabilitation and reconstruction. They should participate in the post-disaster activities, in co-ordination with GSDMA or the DC and in alignment with the overall policies and guidelines developed by the Authority. They should co-operate in providing feedback regarding progress and outcome of rehabilitation and reconstruction projects undertaken in their vicinity.