



GOVERNMENT OF NAGALAND
NAGALAND STATE DISASTER MANAGEMENT AUTHORITY
HOME DEPARTMENT
NAGALAND : KOHIMA



DEPARTMENTAL DISASTER MANAGEMENT
PLAN TEMPLATE

NSDMA

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Executive Summary

CONTEXTS

Nagaland is one of the most multi-hazard prone States of India. The State faces various types of natural hazards like the geological hazards of earthquake and landslide; the hydrological hazards of flash floods, storms, hailstorms and cloudbursts; and the climatologically hazards of droughts and forest fire. The frequency and intensity of most of the hydro meteorological hazards are compounded by the climate change and its impacts on agriculture, horticulture, human settlements and human and animal health.

Every year the State of Nagaland has been plunged into a state of crisis due to heavy thunderstorms and incessant rains, with many areas of low laying hills flooded and submerged, including large part of the commercial city Dimapur requiring hectic evacuation and rescue operations resulting into several casualties, damage of properties/crops/livestock. The State Govt. has been putting all efforts to contain the crisis, however beyond the coping capability of the State due to massive quantum of infrastructural damages in many locations.

The climate induced disasters have been impacting directly in the developmental front especially for the hilly state like Nagaland. During 2018 due to extreme weather pattern the economic costs of disasters for state of Nagaland remain high and are likely to increase in the future due to the climate change factors.

The infrastructural damages especially in the road and bridges sector and impact of disaster on the individual properties have direct reversed impact to economic growth of the State. The infrastructures which took many years to build has been washed away or destroyed in few seconds.

The rebuilding of such damaged infrastructures will impact and halt developmental progress. It is imperative for understanding the economics of disaster to propel the developmental efforts of the State by the effective investment and decision-making in disaster risk reduction.

Assessing the economic impacts of disasters should be the priority of rational investment. Disasters have been, and continue to be, human tragedies. Government policy and/or public investment should take into account the impact of disasters for the economic growth of the community.

In the recent years Nagaland has experience micro effect of climate change which is leading the State towards more vulnerable and hazardous zone. The drastic changes in the annual rainfall have caused huge loss to the agro State Economy. The following are the analysis of climate pattern in the state from 2010-2017.

Table No. 1.

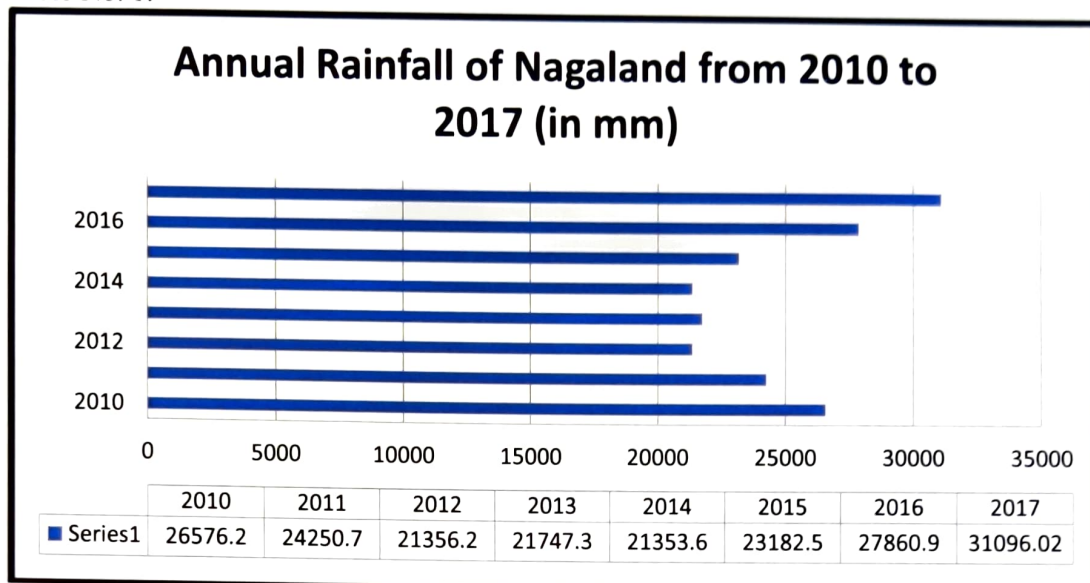
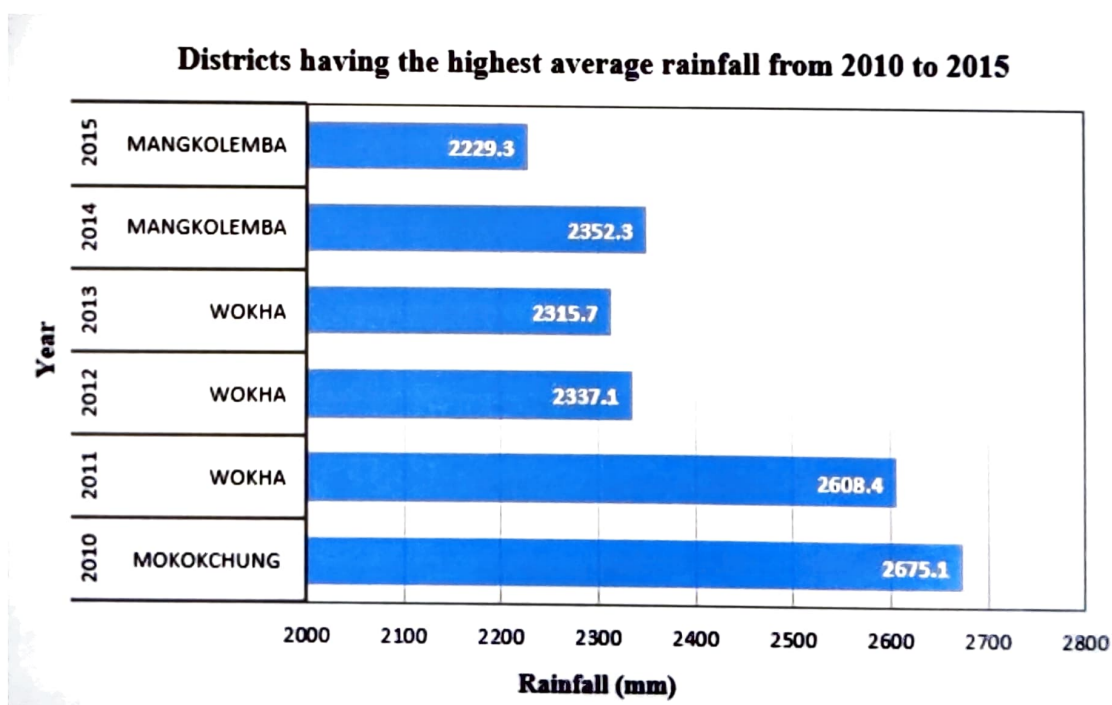
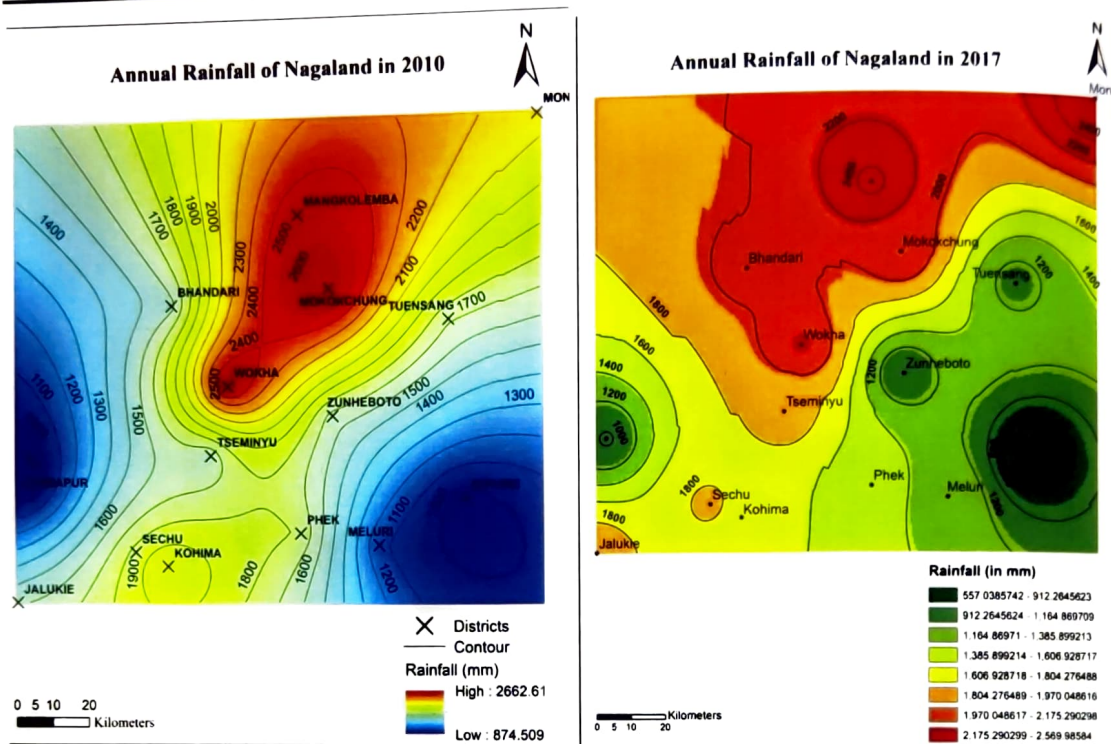


Table 2.



Distribution pattern of rainfall between 2010 and 2017 is shown in the figure below:



DIVERSE LANDSCAPES OF DEPARTMENTS:

Tentative list Departments for the preparation of their Departmental DM plans have wide range of issues that may broadly be classified in five main sectors – regulatory sector, productive sector, infrastructure sector, social sector and environment sector - while the sixth sector is the urban and rural local governance with multiple sectors converge.

Sl. No.	Sectors	Departments
1	Regulatory sector	1. Police Department 2. Department of Civil Defence, Home Guards & Fire Services
2	Productive sector	1. Department of Industries 2. Department of Agriculture 3. Department of Horticulture 4. Department of Animal Husbandry & Veterinary Services
3	Infrastructure sector	1. Public Works Department 2. Water Resources Department 3. Public Health Engineering Department 4. Power Department 5. New and Renewable Energy 6. Transport Department
4	Social sector	1. Department of School Education 2. Department of Higher Education 3. Department of Health and Family Welfare 4. Department of Women Resource Development
5	Environment sector	1. Department of Forest, Environment & Climate Change 2. Science and Technology Department
6	Other sectors	1. Department of Food & Civil Supplies 2. Legal Metrology and Consumer Protection. 3. Information and Public Relations Department 4. Printing & Stationery Department 5. Department of Art and Culture
7	Multi-sectoral local governance	1. Urban Development Department

1. The role of the regulatory sector is mostly limited to disaster preparedness and disaster response, while most of the remaining sectors have responsibilities for pre-disaster prevention, mitigation and preparedness as well as post-disaster response recovery and reconstruction.
2. For the productive sectors the government creates the regulatory and enabling environment, but the main drivers are the private sectors – the farmers, growers, manufacturers and the corporate. Therefore for the government the tasks of regulation is to ensure that gains of development in agriculture, horticulture and industries in

- both organized and non-organized sectors are protected from the risks of disasters and that the process of development does not create any new risks of disasters.
3. Infrastructure plays key role in the economy and therefore critical infrastructure like road, power, transport, supply chain, civil aviation etc must be developed with standards and specifications that are resilient to the shocks of natural hazards like earthquake, landslides, flood etc. Public sector traditionally remained the main investor on infrastructure, but with the liberalization of the economy innovative public-private-partnerships are taking place in many areas, which makes it imperative for the concerned departments to make sure that such investments are safe and these are not inadvertently creating new risks of disasters. Substantial investments have taken place over the years in tourism sector in both public and private sectors contributing significantly to the economy of the State. Such investments should also be protected from the risks of disasters.
 4. Education, health, women and child development are important social sectors that play key role for developing capacities of people, particularly those belonging to the vulnerable segments of society. There are empirical evidences that vulnerable sections of society bear unequal burden of disasters. Therefore integration and further mainstreaming of disaster risk reduction in the programmes, projects and activities in these sectors can reduce the vulnerabilities and further harness their capacities for building resilience of the communities.
 5. Environment and forests are connected with disasters in a two-way process. While on the one hand these offer important eco-system services that provide natural shields against disasters, on the other hand disasters have damaging impacts on environment that take considerable time to rebuild and regenerate. The Disaster Management Plan in environment and forests sector has to factor both these processes.
 6. The Departments like Food & Civil Supplies and Consumer Affairs, Printing and Stationary, Information and Public Relations and Language, Art and Culture may not be easily fitted in a particular sector, but each of these departments have roles to play before, during and after disasters that should be factored in the preparation of their respective disaster management plans.
 7. Various sectoral issues converge in urban and rural authorities – the municipalities and the Panchayati Raj institutions – that the people elect for their local self-governance. These authorities are closest to the communities and therefore provide crucial role in implementing sectoral plans at the grassroots.

PRINCIPLES AND APPROACHES:

Each Department has its unique and specific role and responsibilities that must be the focus in their respective Disaster Management Plans. However there are common principles and approaches that should be followed by all the Departments for the preparation of their respective Departmental DM plans Principles.

The four common principles that should be followed are as follows:

1. The Plan must conform to the mandates of the Disaster Management Act.
2. The Plan must be anchored firmly with the State Disaster Management Rules.

3. The Plan must follow the guidelines issued by the National Disaster Management Authority and the State Disaster Management Authority.
4. The Plan must be built on the action points prescribed for the Departments in the State Disaster Management Plan.

Mandates of Disaster Management Act:

Disaster Management Act 2005 has prescribed;

- (a) the process to be followed for the preparation and implementation of the Departmental DM Plans; (b) the broad elements of such plans, (c) and the responsibilities of the departments of the State Government.

Process of departmental DM Plan:

Section 40(1) of the Disaster Management Act stipulates that every department of the State Government shall prepare its disaster management plan which shall be in conformity with the guidelines laid down by the State Disaster Management Authority. This plan shall be reviewed and updated annually.

A copy of the plan shall be furnished to the State Disaster Management Authority and a status report regarding the implementation of the plan shall be furnished to the State Executive Committee.

Elements of departmental DM Plan: Section 40(1) (a) of the Disaster Management Act provides that the plan shall lay down the following five elements:

- (i) The types of disasters to which different parts of the State are vulnerable;
- (ii) Integration of strategies for the prevention of disaster or the mitigation of its effects or both with the development plans and programmes by the department;
- (iii) The roles and responsibilities of the department of the State in the event of any threatening disaster situation or disaster and emergency support function it is required to perform;
- (iv) Present status of its preparedness to perform such roles or responsibilities or emergency support function; and
- (v) The capacity-building and preparedness measures proposed to be put into effect in order to enable the Ministries or Departments of the Government of India to discharge their responsibilities under section 37.

Under section 37 of the Disaster Management Act every Ministry or Department of the Government of India is similarly mandated to prepare its disaster management plan. Linking the departmental DM plan of Government of India with that of the State Government, as provided in section 40 of the Disaster Management Act, means that Ministries or Departments of Government of India have to take cognizance of the capacity building and preparedness measures proposed by the counterpart departments in the State. This is a significant provision of the Disaster Management Act that has generally been overlooked. The Departments of the State Government are therefore; are

advised to take benefit of this provision of law so that it can work in tandem with the Government of India.

Financing of departmental DM Plan:

In order that the departmental DM Plans does not remain a formal requirement of law, section 40(2) of the Disaster Management Act provides that every department of the State Government, while preparing the plan shall make provisions for financing the activities specified therein.

Responsibilities of the departments of the State Government:

Section 39 of the Act has defined in detail the responsibilities of the departments of the State Government. Every department shall:

- a) take measures necessary for prevention of disasters, mitigation, preparedness and capacity-building in accordance with the guidelines laid down by the NDMA and the SDMA;
- b) integrate into its development plans and projects, the measures for prevention of disaster and mitigation;
- c) allocate funds for prevention of disaster, mitigation, capacity-building and preparedness;
- d) respond effectively and promptly to any threatening disaster situation or disaster in accordance with the State Plan, and in accordance with the guidelines or directions of the NEC and the SEC;
- e) review the enactments administered by it, its policies, rules and regulations with a view to incorporate therein the provisions necessary for prevention of disasters, mitigation or preparedness;
- f) provide assistance as required by the NEC, the SEC and District Authorities, for
 1. drawing up mitigation, preparedness and response plans, capacity-building, data collection and identification and training of personnel in relation to disaster management;
 2. Assessing the damage from any disaster;
 3. Carrying out rehabilitation and reconstruction;
- g) make provision for resources in consultation with the SDMA for the implementation of the District Plan by its authorities at the district level;
- h) make available its resources to the NEC or the SEC or the District Authorities for the purposes of responding promptly and effectively to any disaster in the State, including measures for
 1. providing emergency communication with a vulnerable or affected area;
 2. transporting personnel and relief goods to and from the affected area;
 3. providing evacuation, rescue, temporary shelter or other immediate relief;
 4. carrying out evacuation of persons or live-stock from an area of any threatening disaster situation or disaster;
 5. setting up temporary bridges, jetties and landing places;
 6. providing drinking water, essential provisions, healthcare and services in an affected area; and
- i) take such other actions as may be necessary for disaster management.

This comprehensive charter of responsibilities of the departments of State Government makes it imperative that these must also be incorporated into the departmental DM Plans of the State

Government. State Disaster Management Rules and also State Incident Response System outline the specific responsibilities of the Departments and other agencies for the performance of different functions of disaster management, namely:

- (i) Institutional arrangements,
- (ii) Disaster prevention and mitigation,
- (iii) Early warning system,
- (iv) Disaster preparedness and response,
- (v) Human resource development,
- (vi) GO-NGO coordination and
- (vii) Resource and knowledge management.

The specific action to be taken by the Departments of the State Government is provided in a matrix attached as Annexure-I as per the State Disaster Management Rules and Incident Response System. These must be factored in the Departmental DM plans of all concerned Departments.

The State Disaster Management Rules further devotes a paragraph on 'Role of State Government Departments at State and District Level' highlighting the importance of integrating disaster risk reduction in development. The departments will inter alia integrate into its development plans and projects, the measures for prevention of disaster and mitigation, allocate funds for prevention of disaster, mitigation, capacity-building and preparedness, respond effectively and promptly to any threatening disaster situation or disaster in accordance with the DDMP and direction issued by the SEC or the DDMA, review the enactments administered by it, its policies, rules and regulations with a view to incorporate therein the provisions necessary for prevention of disasters, mitigation or preparedness, provide assistance, as required, by the National Executive Committee, the State Executive Committee and District Authorities, for drawing up mitigation, preparedness and response plans, Disaster Management Guidelines.

The National Disaster Management Authority has issued nearly two dozen national guidelines for management of various types and aspects of disasters. Many of these guidelines, particularly those related to management of earthquakes, flood, drought, landslides, medical preparedness, seismic retrofitting of buildings etc are extremely relevant in the contexts of Nagaland. The concerned departments are well advised to factor these guidelines for the preparation of their respective DM Plans.

The DM Plans would contain all aspect of disaster management as enshrined in the definition Section 2(e) of the Disaster Management Act e.g. prevention, mitigation, preparedness, capacity building, response, etc.

1. The Guidelines issued by the NDMA for the management of various disasters and the roles assigned to various departments would be taken into consideration while preparing the plans.
2. The Plans would be regularly improved and updated (at least once a year).
3. Nodal officers at all levels would be appointed to activate and implement the plans.
4. Financial provisions would be made within the normal programmes, schemes, and budgetary allocation of the department to implement the provisions of the DM Plan. State Disaster Management Plan.

The specific actions to be taken by each Department and agency of the State Government are detailed in three specific sections of this comprehensive document. The responsibilities of

each Department are given in detail in the Incident Response System (IRS)/ Standard Operating Procedures for responsible Departments/agencies.

Standard Operating Procedures for responsible Departments:

SDMP has outlined the Standard Operating Procedures (SOP) in respect of all responsible Departments and agencies of the State Government. These include the primary tasks of the departments, and the functions to be performed for mitigation, preparedness, early warning, response, recovery and rehabilitation. This will provide good guidance to the Departments to prepare their respective DM Plans.

The Sendai Framework for Disaster Risk Reduction has rightly pointed out that disaster risk reduction and management requires the 'full engagement of all State institutions and further an 'all-of-society engagement and partnership'.

Unfortunately the Departments tend to work in solos without connecting and communicating with each other often resulting in situations when the proverbial 'left hand' of the government does not know what the 'right hand' is doing. Further the Departments fail to engage with the stakeholders in their respective sectors resulting in disconnect with the people. This culture of departmentalism runs counter to effective disaster risk management. The Departmental DM plan should therefore go beyond the departmental issues to address the larger sectoral and cross-cutting issues of disaster risk management for realizing the vision of building a disaster resilient Nagaland. The manners in which these issues shall be addressed are provided in detail in this template.

STRUCTURE OF DEPARTMENTAL DM PLANS:

The Disaster Management Plans of the Departments may be structured in eight main chapters as follows. This structure may be suitably adjusted by some Departments that may not have much role to play on specific aspects of disaster risk management as outlined in these chapters. The Departments would be free to make necessary changes as per their requirements.

1. Introduction
2. Hazard, Risk and Vulnerability Analysis
3. Risk Prevention and Mitigation
4. Mainstreaming Disaster Risk Reduction in Development
5. Disaster Preparedness,
6. Disaster Response and Relief
7. Disaster Recovery and Reconstruction
8. Financial Arrangements

Chapter-1: Introduction:

Overview of the Department:

The overview of the Department should include its brief history, functions, achievements, organizational structure, location of its offices and assets, annual revenue and capital budget. Names and contact details of the officers need not be mentioned.

Purpose:

Purpose of the Plan The basic purpose of departmental DM plan is to provide guidance to all the agencies within the department to manage the risks of disasters before, during, and after disasters. These include assessing the sectoral and departmental risks of disasters, mitigating the existing risks of disasters, preventing creation of new risks of disasters, presenting the status of its preparedness to perform its role and responsibilities as defined in the State DM Policy and State DM Plan, measures proposed for strengthening capacity-building and preparedness etc. The Departments may include department specific purpose of the Plan.

Scope:

Scope of the Plan explicitly state the types of disasters, the entities (agencies within department), the geographic areas and the types of functions in respect of which the plan applies.

Authorities, Codes, Policies:

Present the framework of laws, regulations, codes, policies etc. within which the Department discharges its role and responsibilities in the Government, with particular reference to those provisions that have relevance for disaster risk management.

Institutional arrangements for Disaster Management:

Mention the position of the Department in the institutional mechanisms of disaster management in the State, such as State Disaster Management Authority, State Executive Committee, State Crisis Management Group etc. The roles and responsibilities of the Department in the existing State Disaster Management Plan and the institutional arrangements for disaster management within the Department, such as the nodal officers responsible for various emergency support functions, channel of communication and decision making authorities etc. may also be outlined in detail. If the Department has an internal control room or emergency operation centre, the same may also be mentioned along with details.

Plan Management (Implementation, Monitoring and Revision):

Mention the authorities within the Department, at various levels and at different locations, responsible for implementation, monitoring, revising, reviewing, and updating the basic plan, annexes, appendices, and supplementary documents, such as checklist, SOPs, etc. The coordination mechanism available within the Department for implementation of various aspects of the plan before, during and after disasters may also be mentioned with details.

Chapter-2: Hazard, Risk and Vulnerability Analysis:

Risk Assessment of Nagaland: The risk of disasters is typically presented with the help of the equation $R = [(h \times v) \times e] \div c$ where 'R' denotes the risks of disasters; 'h' the hazards or the potentials of a physical event that may cause loss of life or property; 'v' the vulnerabilities or the factors or processes - physical, social, economic, and environmental - which increase susceptibility of an area or a community to impact of hazards; 'e' exposures of vulnerable population and assets to hazards; and 'c' or capacities or resources available within a community, society or organization that can reduce the level of risk, or the effects of disasters.

Nagaland SDMP provides a comprehensive analysis of all types of hazards, vulnerabilities, exposures and risks of disasters in different parts of the State. It is not necessary to repeat the same in the departmental DM Plans, as has been done in a few departmental DM Plans that have been prepared. Using the maps, data and information provided by the HRVA, the departments shall make their own assessments of both the sectoral and departmental risks of disasters and present the same in the DM Plans.

Assessment of Sectoral and Departmental Risks:

The sectoral risks of disasters consist of the risks for the entire sector that the department represents. For example, the Animal Husbandry may assess the potential risks to animal population of the State due to hazards like flash floods in any specific region. Town Planning Department may make assessment of risks of all the notified towns of Nagaland. Similarly every department shall make risk assessment in respect of its sector. The departmental risks of disasters consist of the risks arising out of the exposure of vulnerable departmental assets to the natural or manmade hazards. For example, the Public Works Department may assess the risks of roads, bridges and public buildings under its maintenance due to landslides or earthquakes in different districts of the State. The Department of Education may assess the risks of unsafe school building in various hazard zones of the State. Locating these assets on the hazard map of the State would make a good visual presentation of the possible risks of departmental assets. HRVA maps developed recently shall be useful for locating departmental assets on various hazard zones of the State. Some of the concerned Departments like agriculture, horticulture, irrigation and public health etc. may further assess the potential risks of disasters due to emerging issues like climate change. The Nagaland State Strategy and Action Plan on Climate Change provide good information on possible impacts of extreme climatic events due to climate change in the concerned sectors.

Assessment of Capacity Gaps and Needs:

The Departments shall also make critical assessment of their capacity for disaster risk management before, during and after disasters. The capacity assessment shall typically include review of current capacities, analysis of capacity gaps, requirement of capacity needs and the manner and the time frame by which these gaps shall be addressed.

Assessment of Probable Damage and Loss:

The Departments may provide details of actual damage and loss suffered by the sector and by the department due to disasters in the past. Such information available in departmental archives should be retrieved as much as possible. This will give good ideas about the pattern

and trend of such losses in the past, based on which projections can be made of future losses. Based on the vulnerability mapping of sectoral and departmental assets Departments can develop various disaster scenarios and estimate Probable Maximum Loss (PML) and Average Annual Loss (AAL) due to disasters. PML is worked out on the basis of worst possible disaster scenarios as per HRVA analysis, while AAL is estimated on the basis of past trend of disasters. This will provide a good basis for Cost-Benefit Analysis of investments on risk prevention and mitigation.

Chapter-3: Risk Prevention and Mitigation:

Risk Prevention:

Risk prevention is preventing creation of new risks of disasters. Such risks may be created unwittingly by the Departments directly through public investments or indirectly through facilitation of private investments that are vulnerable to the risks of disasters. Therefore every investment must go through HRVA to check if new programmes, activities or projects have the potential to create new risks of disasters. If such investments cannot be avoided these must be protected by safeguards through adequate structural and non-structural risk prevention measures so that the benefits of investments are fully protected from the risks of disasters. For example, hydro-electric projects in seismic zones must be designed in such a manner that these are able to withstand the shocks of maximum probable earthquakes in the region.

Risk Mitigation:

Risk mitigation is reducing the risks of disasters that are already there due to exposure of vulnerabilities to the hazards. Mitigation projects reduce the level of exposures or the depth of vulnerabilities or both through a combination of various structural and non-structural measures. Mitigation projects are always costly and therefore these have to be planned with proper Cost Benefit Analysis (CBA) to ensure that the benefits of the projects outweigh the costs. In conventional CBA benefits arising of possible reduction of risks of disasters are not calculated. There are innovative tools for estimating the benefits to risk mitigation, which would be useful to the planning and finance departments for taking investment decisions on mitigation projects.

Strategies for Risk Prevention and Mitigation:

The Departments that do not usually have adequate budgetary allocations on risk mitigation, as such, may have to develop strategies for risk prevention and mitigation for short, medium and long term basis. The National and State policies, Guidelines and Plans on disaster management shall provide strong justifications and support for such investments. The Departments should make use of these instruments for justifying their proposals for risk prevention and mitigation projects. Otherwise the Departments have always the opportunities for mainstreaming disaster risk reduction in the existing programmes, activities and projects.

Matrix of Hazard Specific Mitigation Measures Based on their strategies for risk prevention and mitigation, Departments shall prepare a matrix detailing hazard specific structural and non-structural measures to be implemented for disaster risk prevention and mitigation in their respective sectors. The time frame for implementation of the activities shall also be mentioned in this matrix.

Chapter-4: Mainstreaming Disaster Risk Reduction in Development:

Policy Framework on Mainstreaming Disaster Management Act has stipulated that DM Plans of the Departments of State Government shall integrate strategies for prevention and mitigation of the risks of disasters with the development plans and programmes of the department.

The State Disaster Management Rules, following the National Policy, prescribed 'DRR Mainstreaming' in the following words: The DRR issues would be mainstreamed in development plans, programmes and policies at all level by all the departments, organisations and agencies. It would be ensured that all the development programmes and projects that originate from or funded by Government are designated with evident consideration for potential disaster risks to resist hazard impact. That all the development programmes and projects that originate from or are funded by Government do not inadvertently increase vulnerability to disaster in all sectors: social, physical, and economic and environment. It would also be ensured that all the disaster relief and rehabilitation programmes and projects that originate or are funded by Government are designed to contribute to development aims and to reduce future disaster risk.

Concerned Departments may therefore incorporate structural and non-structural measures for disaster risk reduction into the projects according to the contexts of local situations within the broad framework and guidelines of the programmes. For example, construction of school buildings under Sarva Siksha Abhiyaan may conform to the standards of seismic safety even if this involves higher costs. If the guidelines of the programme do not permit higher costs, the State Government may bear the additional costs involved from their own sources.

Therefore mainstreaming may involve innovative adaptation of national programmes according to local contexts for disaster reduction. Many State Governments have made such innovative adaptations which the Departments may like to consider on their merits. With the abolition of Planning Commission and devolution of higher tax revenue to the States, many central sector and centrally sponsored plan programmes are undergoing changes. The State Governments shall therefore have greater freedom to design state specific development programmes and projects. This will create new opportunities for disaster risk reduction. The Departments are therefore well advised to propose specific programmes of disaster risk reduction in their respective sectors, based on the assessment of risks in their sectors and the likely benefit of such programmes. Every Department of the State Government implements state level development programmes that provide good entry points for mainstreaming DRR in development. The Departments may therefore explore the possibilities of mainstreaming DRR in as many existing programmes and projects as possible. This will ensure that existing development projects are not creating any new risks of disasters; on the contrary the projects are designed in such a manner that these would facilitate the process of risk reduction without any significant additional investments.

Mainstreaming DRR in Project Cycle Management:

The best way to ensure that DRR is mainstreamed into the development projects is to integrate this into the Project Cycle Management (PCM). PCM is the process of planning, organizing, coordinating, and controlling of a project effectively and efficiently throughout

its phases, from planning through execution, completion and review to achieve the pre-defined objectives at the right time, cost and quality. There are six phases in PCM - programming, identification, appraisal, financing, implementation and evaluation. The first three phases are the initial planning phases of the project which provide key entry points for mainstreaming.

Chapter-5: Disaster Preparedness:

Strategies for Disaster Preparedness:

The risks of disasters that are neither prevented nor mitigated either through direct investments or mainstreaming in existing programmes, activities and projects are the residual risks. These are also described as 'accepted risks'. Some of these accepted risks of individuals, families, groups or companies can be pooled together and transferred through market based insurance mechanisms. In developed economies insurance covers a large share of unmitigated residual risks thereby reducing sovereign burden for disaster relief. In developing countries, with high residual risks and low risk insurance, probabilities of disasters are very high and therefore the level of disaster preparedness should also be of a very high order. Therefore disaster preparedness occupies a prominent place in our system of disaster management at national as well as state levels. Disaster preparedness has been defined as 'the state of readiness to deal with a threatening disaster situation or disaster and the effects thereof'. The Departments may review their 'state of readiness' and prepare strategic action plan to deal with possible disaster situations.

Measures for Disaster Preparedness:

The National Policy and Nagaland State Disaster Management Rules have prescribed the following measures for disaster preparedness:

- a. Capacity Development.
- b. Forecasting and Early Warning Systems.
- c. Medical Preparedness and Mass Casualty Management.
- d. Communications and Information Technology Support.
- e. Setting up and Strengthening of Emergency Operations Centre.
- f. Training, Simulation and Mock Drills.
- g. Community Based Disaster Preparedness.

The Nagaland State Disaster Management Rules has laid down in detail the specific measures to be taken by various departments and agencies of the government on each of these measures for disaster preparedness. The Departments may review the status of their preparedness in respect of each of these measures, to the extent these are relevant for their respective areas of operation, and chalk out detailed plan of action for addressing the lacunae and gaps in the existing system. Departments shall prepare a Check List of Disaster Preparedness which would form integral part of the Departmental Disaster Management Plan. This Check List would be useful to review that every necessary action for disaster preparedness has been taken and the Department is not caught unaware during rapid or slow onset of disasters.

Chapter-6: Disaster Response and Relief:

Response Plan:

The response plan of the Department includes design of actions based on Standard Operating Procedures and tested through mock drills and exercises that would be initiated on a trigger mechanism based upon the impending or actual occurrence of an event of disaster.

The list needs to be suitably modified and adjusted according to the specific role and responsibilities and the Emergency Support Functions (ESF) assigned to the Department in the State Plan. An indicative list of the components of response plan is as follows:

- a) Institutional arrangements within the Department for disaster response. This will include details of the persons/positions assigned with responsibilities of response and interaction with State and District Disaster Management Authorities.
- b) Emergency Operation Centre/ Control Room of the Department, if any, and its interface with State or District EOC.
- c) Incident Response Team of the Department, if any
- d) Classification of disaster type and response activities specific to disaster
- e) System of receiving and managing alerts
- f) Evacuation, search and rescue operation
- g) Requisition of services/ assistance
- h) Relief and rehabilitation
- i) Emergency restoration of critical facilities

Emergency Support Functions:

Many Departments and agencies are required to perform Emergency Support Functions as detailed in State DM Plan. Departmental DM Plan may provide details regarding how these functions shall be discharged by the Departments. Relief and Rehabilitation Relief and rehabilitation of the persons affected by disasters is an important function post-disaster response. Typically the tasks of relief and rehabilitation include the following:

- a) Emergency medical response.
- b) Food and nutrition.
- c) Water and sanitation.
- d) Health including mental health.
- e) Clothing and utensils f) Shelter.
- f) Management of relief camps.

Emergency Restoration of Critical Facilities Infrastructure related Departments, such as Public Works, Irrigation and Public Health, Electricity etc. would be required to restore critical facilities like communication, power and water supply etc. immediately on the aftermath of disaster. The concerned Departments should have a contingency plan readily available for emergency restoration of the critical facilities, till the damaged assets are reconstructed. The expenditure to be incurred for this purpose can be similarly charged under the SDRF.

Matrix of Hazard Specific Response and Relief Measures Based on their respective plans for disaster response and relief, Departments shall develop hazard specific matrix of activities to

be performed for disaster response and relief. This matrix would serve as a ready reckoner for emergency support functions of the Department.

Chapter-7: Disaster Recovery and Reconstruction:

Disaster Recovery:

The process of recovery from small scale disasters is usually simple. Recovery operations get completed almost simultaneously with response, relief and rehabilitation. However in medium and large disasters involving wide spread damages to lives, livelihoods, houses and infrastructure the process of recovery may take considerable time as the relief camps continue till houses are reconstructed. Often intermediary shelters have to be arranged before the permanent settlements are developed. Therefore some of the Emergency Support Functions may continue for months. Departmental DM Plans should anticipate eventualities of longer duration recovery operations.

Damage and Loss Assessment:

One important function that Departments are required to function is to assess the damage and losses in respect of the sector it represents. For example, agriculture department would assess the losses to agricultural land and crops, infrastructure departments would assess the damages to infrastructure in respective sectors, revenue department would assess the loss of human lives etc. Typically departments assess the direct costs of the damaged assets; they do not factor the indirect or opportunity costs of the damages, what is described generically as 'losses'. For example, damages to an industrial unit would be assessed in terms of the costs of its reconstruction; but this would not factor the losses suffered due to loss of production.

There are improved methodologies for damage and loss assessment that may be adopted by the Departments replacing the age old methods of damage assessment. The State DM Plan is silent on this important aspect of disaster management. It is expected that the revised State DM plan may come up with new methodologies for damage and loss assessment and accordingly Departments may adopt similar plans and procedures in their departmental operations.

Disaster Reconstruction:

Post-disaster reconstruction activities following major and catastrophic disasters may continue for a long time often extending between 3 to 5 years. Generally funding arrangements for such reconstruction are made through soft loans taken by Government of India from multi-lateral financial institutions.

Post-disaster construction provides an opportunity for 'Building Back Better' so that the reconstructed assets are able to withstand similar or worse disasters in future. It is difficult to anticipate such reconstructions as these would depend on the types and location of the disasters and the nature reconstructions to be made, which would be known only after the disasters.

However the major Departments that would generally be involved in such reconstructions, such as Public Works, Power, Housing and Urban Development etc. should have the

standards and specifications of 'building back better' readily available so that unnecessary times are not lost in planning, designing and estimating projects for reconstruction.

The Planning and Design Wings of the major construction departments should have the necessary wherewithal for developing the blue prints of such reconstruction projects soon after the damage and loss assessment in disasters are made. This should be built into the DM Plans of the concerned departments.

Chapter-8: Financial Arrangements

Section 40(2) of the Disaster Management Act stipulates that every department of the State Department, while preparing the DM Plan, shall make provisions for financing the activities proposed therein. Normally the funds required for risk assessment and disaster preparedness must be provided in the budgets of every concerned department. Such funds are not very sizeable and departments should be able to allocate such funds within their normal budgetary allocations. The marginal costs involved in mainstreaming disaster risk reduction in existing programmes, activities and projects of the departments are also not very sizeable and the departments may not find it difficult to arrange such funds.

However, funds for disaster prevention and mitigation may not be available so easily unless the departments are able to negotiate such projects with the planning and finance departments with proper cost-benefit analysis.

The departments are therefore forced to divert funds from their normal development or maintenance budgets which become problematic. Financing small/ medium scale post-disaster reconstruction has remained one of the unresolved issues of disaster management in India. The more enterprising and pragmatic departments may therefore provide a cushion for such projects in their budget or alternatively make use of 'untied grants' that are made available to some of the departments.

The Departmental DM Plan of Nagaland has been adopted from
NDMA guideline and Himachal Pradesh SDMA Departmental DM plan.



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