



DISASTER RISK REDUCTION (DRR) ROADMAP OF ASSAM

(CACHAR DISTRICT DRR ROAD MAP DRAFT REPORT)

DISTRICT: CACHAR



**District Disaster Management Authority, Cachar
O/o The Deputy Commissioner, Cachar**

Emergency no: 03842-239249/1077/9401624141

Email ID: ddmacachar@gmail.com.

1. **Background:**

Cachar district comprises of 5 Revenue Circles and 15 Development Blocks with an estimated 1040 villages and 42 uninhabited villages.

As per census, population of Cachar district is 1,736,319 with [gender ratio](#) of 958 [females](#) for every 1000 males. The average size of family ranges from 4-5 members and the adult nuptial age is about 25-35 years. People from diverse religious, caste linguistic and ethnic background cohabit harmonically in this district.

The key development indicator encompasses the physical, economical, social and environmental aspects of the district. Over the years, the district witnessed high growth in physical assets like road, rail, water, air, communication and technology network, health and educational institutes, industries, banks, offices, markets, residential townships, apartments, houses, religious places of worship, sports and entertainment complex etc many of those are multi hazard non-resilient, thus had multiplied the risk on developmental outcomes of the district. Socio-economic development indices of the district like gross industrial and agricultural productivity, per capita income, literacy rate, employment rate, poverty rate, unsecured indebtedness, gender ratio, mortality rate (child and adult) etc are priority areas which need to be protected from disaster impacts. As per 2011 census, the average literacy rate of Cachar District is around 85% where male literacy rate is higher than the female literacy rate and the percentage distribution of the working and non-working population of the district is 35 % and 65 %. Also the green assets and the environmental heritage of the district need to be preserved and protected from the present unsustainable developmental practices.

The Assam DRR Road Map preparation includes a decentralized discourse with all stakeholders of each district where from relevant inputs would be compiled and processed.

In conformance with the objective and rationale of the Assam DRR Road map, the Cachar District DRR Road Map is prepared to sensitize the DDMA members and other stakeholders on the need for renewed and effective actions for disaster risk reduction. The proposed district specific disaster risk reduction road map has been designed to be an inclusive process where views, opinions, experiences and

expertise of various stakeholders are taken into consideration and consequent actions are framed thereof with equitable delegation and ownership of stakeholders at all levels.

2. Situational Analysis:

Cachar district is disaster prone, and so disaster risk here is complex, multidimensional and dynamic owing to various natural and human induced causal factors. Exposure of vulnerable population to natural hazards like earthquake, drought, flood, cyclone, hailstorm, lightning, river bank erosion, landslide, surface and ground water scarcity etc had a history of impairment of quality of life and livelihood of the people of Cachar district. Human induced hazards like fire, urban flood, water-drowning, boat capsizing, road-rail and work environment accidents, epidemics, untreated solid and liquid waste, food adulteration etc took their respective toll in human , socio- economic and environmental resources of the district. In the past 10 years, several individuals, families and communities were victims of both irreversible and reversible damages and loss. Institutional and societal capacity gaps together with pre-existing vulnerabilities had manifold increased the exposure of risk elements of disaster. The loss of resources, food security and access to shelter had offset the developmental gains which lead to unstable livelihood means, population migrations, poverty, unemployment, encroachment etc.

3. Process followed in the District:

For developing this recommendation report, DDMA Cachar has undertaken a multi-staged outreach, research, processing, compilation, documentation and feedback program in consonance with procedural framework from ASDMA. At the initial level Circle Level Disaster Management Committee (CDMC) meeting was organized at each revenue circle of the district viz., Udharbond, Silchar Sadar, Sonai, Katigora & Lakhipur wherein stakeholders and common citizens shared their valuable experience, opinion, suggestion and information. After completion of CDMC level consultation, the district level consultation under the Chairmanship of the Deputy Commissioner, Cachar was held. District level stakeholders, central rescue agencies, independent consultants, students, volunteers and others

discussed over the district DRR Roadmap which evolved some key findings with formulation of action plan.

4. Key Findings and Plan of Action:

Name of the Hazard	Impact of Development Outcome	Disaster Risk Reduction Action	Timeline I=(2019) S=(2022) M=(2025) L=(2030)	Location (Whole district /Specific RC)	Responsible Department	Responsible Official	Budget Remarks 1= possible within existing schemes 2= Need Additional Resources
NATURAL HAZARD Hydro meteorological a) Flood/River Bank erosion	A) Almost 80% of the spatial population of the district was found vulnerable during major flood on 2010, 2012 and 2018 with sufferer being 2.5 to 3.0 lacs approximately. B) Around 60 flood drowning cases occurred over last 10 years. C) Around 1,11,000 shelters were damaged in last 10 years - partial(pucca/kutch): 1,08,310 -full damage(pucca/kutch): 990 -huts/cattle sheds damage: 1700 D) Around 90 schools, 13 Anganwadi Centres, 1547	River bed dredging and improvement of waterway transport.	M	Whole	Concerned line departments, CSO etc.	Concerned Head of Offices	2
		Strengthening of Embankments and dykes.	S				
		Tuerial Dam efficacy cum safety review.	M				
		River bank slope stabilization.	I				
		Anti-erosion measures in vulnerable areas.	I				
		Early warning system Strengthening.	I				
		Raising of plinth level, and usable source of water.	S				
		Highland vis-a-vis water catchment area mapping.	I				
		Inventory for rescue, relief and reconstruction resources.	I				
		Community capacity	M				

	<p>toilets, 500 schools, around 12 Health Centers, and 216 Spot Sources/PWSS along with damage of overhead reservoir, office room, staff quarter, barge, 60 embankments breaches 120 roads and culvert damage 14Nos. RCC drop spillways damaged.</p> <p>E) Crop Damage on around 25000 (Ha) involving 537 farm families and 50 Ha fishery area were affected in last 10 years</p> <p>F) Post hazard livelihood, health and sanitation impact on sufferers.</p>	<p>strengthening.</p> <p>Construction of public assets like roads, schools, hospital above HFL.</p> <p>Flood prone structures merit mitigational measures like rigid pavement in roads with hard shoulder.</p> <p>Livelihood, health and sanitation strengthening programs.</p> <p>Encouraging early and staggered sowing among farmers, and growing of submergence tolerant variety of crop.</p>	M					
b) Cyclone/Storm	<p>G) Around 1, 87,000 people had been affected with 35 casualties, 200 injuries in last 10 years by cyclone/storm.</p> <p>H) Around 47,800 houses were damaged.</p> <p>I) Around 427 educational institutes and offices, 16 Health Centers, 17</p>	<p>Strengthening Early warning communication and evacuation system from vulnerable areas.</p> <p>Inventory planning for evacuation, rescue, relief and reconstruction resources.</p> <p>Cyclone/Storm resilient design and</p>	I	Katigorah and Silchar.	Concerned line departments, CSO etc.	Concerned Head of Offices	2	
			I					
			M					

	<p>Anganwadi Centers, 857 toilets and 22 Spot Sources/PWSS, 500 electrical and telecommunication assets damaged. 827 transformers, 2120 kms LT line, 560 kms 11kv 560 Kms, 33 KV 98 kms electric line damaged.</p> <p>J) Crop Damage of around 6700 Area (Ha) involving 296 farm families was affected.</p> <p>K) Post hazard livelihood, health and sanitation impact on sufferers.</p>	<p>construction materials.</p> <p>Conservation of wetland, natural channels, green cover. etc. to prevent water-logging and brisk inundation.</p> <p>Community awareness on risk preparedness and mitigation.</p> <p>Encouraging rural traditional practice of habitat maintenance after harvest season.</p> <p>Encouraging early and staggered sowing among farmers, and growing of submergence tolerant variety of crop.</p> <p>Conversion of overhead electrical line to underground lines.</p>	<p>M</p> <p>I</p> <p>I</p> <p>I</p> <p>M</p>				
c)Lightening /Hailstorm/ Landslide	<p>L) 41 deaths had been reported due to lightening, 5 casualties and 15 injuries due to landslide in 2016-2017.</p> <p>M) Approximately 1000 ha crop lands due to hailstorm and about 12 infrastructure have been affected due to lightening and hailstorm</p>	<p>Roof and wall reinforcement measures in vulnerable public and private structures for hailstorm protection.</p> <p>Slope stabilization</p> <p>Sensitization on safe practices during lightening electrocution.</p>	<p>M</p> <p>M</p> <p>I</p>	Silchar and Lakhipur	Concerned line departments, CSO etc.	Concerned Head of Offices	2
ii) Earthquake	A) Injury to about 70 people , deep	Implementation of Building laws.	I	Whole	Concerned line	Concerned	2

	<p>cracks in 30-35 buildings and around 129 physical structures like schools, colleges, offices, residential places, hospitals affected in last 10 years</p> <p>B) Geo-morphological changes.</p>	<p>Safe Construction practices.</p> <p>Seismic Microzonation</p> <p>Engineers and Masons training.</p> <p>Identification of vulnerable structures and retrofitting.</p> <p>Electric and fire safety audit.</p> <p>Open space mapping.</p> <p>Response and preparedness drill.</p>	<p>I</p> <p>M</p> <p>I</p> <p>M</p> <p>M</p> <p>I</p> <p>I</p>		<p>departments, CSO etc</p>	<p>Head of Offices</p>	
<p>MAN MADE HAZARD Fire</p>	<p>A) Around 247 fire incidents have taken place in last 10 years.</p> <p>B) This hazard has lead to 99 house, 143 commercial establishment damage and 50 casualties.</p>	<p>Sensitization on fire safety.</p> <p>Fire mitigation and prevention exercise.</p> <p>Awareness on fire resistant construction material usage.</p> <p>Industrial, Commercial and domestic fire prevention and mitigation capacity improvement.</p> <p>Line department capacity building.</p>	<p>I</p> <p>M</p> <p>I</p> <p>S</p> <p>M</p>	<p>Whole</p>	<p>Concerned line departments, CSO etc.</p>	<p>Concerned Head of Offices</p>	<p>2</p>

Road/Rail Accident	A) Around 200 deaths in road and 5 deaths road and rail accident have taken place in last 10 years.	Road way, culvert, bridge, rail crossing etc safety and fitness review.	M	Whole	Concern ed line departm ents, CSO etc.	Concer ned Head of Offices	2
		Flow regulation, re-routing and diversion of movement of vehicles, pedestrians and animals.	I				
	B)Around 3000 injuries in Road accident.						
	C) Damage of vehicles, road, railway assets and public property.	Eviction drive on Encroachment, unauthorized parking space, etc.	I				
		Public awareness cum enforcement drive on Raod/rail safety practices.	I				
		Comprehensive Traffic Management.	I				
	Drivers training.	I					
	Speed control mechanism and interceptors.	I					

Urban Flood	A) Around 100 houses, offices, commercial establishments are affected.	Desilting of natural canals and link channels to increase flow capacity.	I	Silchar	Concerned line departments, Municipal Boards/ Town Committees, CSO etc.	Concerned Head of Offices, Municipal Boards and Town committees.	2
	B) Impairment of routine economic, educational, social activities.	Construction of Storm water drainage.	M				
		Solid waste clearance of flow channels	I				
		Ground elevation and gradient maintenance.	S				
		Rain water harvesting.	M				
		Dewater logging by mobile high capacity pumps.	S				
		Source segregated solid waste collection and de-centralized environment friendly treatment and disposal (SLRM).	S				

5. Conclusion:

In view of the dynamic multi-hazard risk exposure, vulnerability and capacity gaps, utmost priority is to save and protect lives, livestock, environment and the developmental assets and gains of the district. Thus a comprehensive approach for preparation of district disaster risk reduction roadmap with key findings and time bound implementable action and financial support is the need of the hour for ensuring an inclusive, sustainable and DRR compliant growth and development to build a disaster resilient society.

District level disaster risk reduction initiatives merits immediate integration with all developmental plan and action at the Gaon Panchayat, Town ,City and Community level for making the district more safer and livable.

Physical, social, cultural and environmental vulnerability reduction measures in one hand and capacity building in terms of assets, resources and coping capacity of at risk community on the other hand would reduce the risk and thus the impact of hazard on all developmental gains. DRR action plan formulation, implementation and mainstreaming with the Gaon Panchayat Development Plan, Urban Legislative Body Development Plan, Town Committee Development Plan and District Development Committee Plan under the supervision of DDMA are required.

**Addl. Deputy Commissioner,
& CEO, DDMA, Cachar.**

**Deputy Commissioner,
& Chairperson, DDMA,
Silchar, Cachar.**