

Resilience Budget in Assam 2023-24



Suggestions and Recommendations for Resilience Budget and implementation of Disaster Risk Reduction Roadmap

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Executive Summary

Assam is highly vulnerable to climate-related disasters, such as floods and earthquakes, which impact millions of lives and livelihoods. The government of Assam is taking action to build disaster resilience by allocating a dedicated budget to the issue and has also formulated the Disaster Risk Reduction Roadmap and State Action Plan on Climate Change 2.0 along with the introduction of a Resilience Budget as strategies to develop plans and approaches that aim to reduce disaster risk and improve climate adaptation and mitigation.

This requires collaboration among different sectors and stakeholders, as well as the need for data-driven decision-making, and investment in

infrastructure, adoption measures, rehabilitation, and relief works. This document outlines recommendations for achieving these in a systematic manner. To strengthen the implementation of DRR through the Resilience Budget:

1. **A disaster risk reduction observatory** should be set up to provide coordinated, high-quality, and open data for disaster management and resilience efforts by setting up a **one-stop, open data platform** to share, track and evaluate all activities and expenditures made under various schemes tagged under Resilience Budget 2023-24. This can ensure the timely identification of disaster risks, strengthen the collaboration among stakeholders, and achieve the target outcomes and agendas of the DRR.
2. **Resilience Analytics, Data and Research Lab (RADAR)** should be set up by ASDMA with a multidisciplinary team that uses data and AI to collate, standardise, publish and analyse data from various sources.
3. Moreover, **detailed planning at the district level** using various indicators such as flood proneness, demographic vulnerability, and infrastructure access is required to reduce disaster risk. Developing and operationalizing district risk reduction roadmaps at the village and revenue circle levels can help build resilience and utilise fiscal resources more effectively.
4. Finally, there is a **need for monitoring and evaluation of schemes** for DRR objectives. With the varied list of objectives listed under the disaster risk roadmap, it is important for the Government of Assam to also monitor and evaluate the status and progress being made with the objectives listed in line with the State indicator Framework and Assam's Agenda 2030.



Introduction

Assam is one of the most climate-vulnerable states, ranked 5th by the Government of India's Department of Science & Technology in their 2019 report on disaster risks and resilience¹. Multiple districts in the state are at acute risk of floods and earthquakes, potentially affecting millions of lives and livelihoods. Assam's vulnerability to disasters highlights the importance and the need for a dedicated budget to build the state's disaster resilience. It is commendable that the state of Assam plans to build resilience with the Resilience Budget Statement for the upcoming financial year in line with the Disaster Risk Reduction Roadmap 2030². We hope other states follow the path of Assam in building a much more Resilient India.

The Disaster Risk Reduction Framework as well as the objectives and targets set by them are critical in addressing the objectives of key international frameworks such as the Sendai Framework for Disaster Risk Reduction (2015-30)³ and The Paris Agreement on Climate Change that aim to significantly lower losses caused by disasters by reducing the number of fatalities, the number of individuals impacted, the economic damages, and the destruction of infrastructure. As part of these commitments, working with stakeholders such as the local governments, civil society organisations, enterprises, the private sector, researchers and the larger public with the use

¹ [Disaster Risks and Resilience in India: An Analytical Study 2019](https://ndmindia.mha.gov.in/images/pdf/Disaster_Risk_and_Resilience_in_India.pdf)

([https://ndmindia.mha.gov.in/images/pdf/Disaster Risk and Resilience in India.pdf](https://ndmindia.mha.gov.in/images/pdf/Disaster_Risk_and_Resilience_in_India.pdf))

² [Assam Disaster Risk Reduction Roadmap 2030](https://asdma.assam.gov.in/sites/default/files/swf_utility_folder/departments/asdma_revenue_uneecopscloud_com_oid_70/this_comm/drr_road_map_2022.pdf)

(https://asdma.assam.gov.in/sites/default/files/swf_utility_folder/departments/asdma_revenue_uneecopscloud_com_oid_70/this_comm/drr_road_map_2022.pdf)

³ [Sendai Framework for Disaster Risk Reduction 2015-2030](https://www.ndma.gov.in/Global/sendai-framework#:~:text=The%20Sendai%20Framework%20for%20Disaster%20Risk%20Reduction%202015-2030,protect%20development%20gains%20from%20the%20risk%20of%20disaster) (NDMA)

(<https://www.ndma.gov.in/Global/sendai-framework#:~:text=The%20Sendai%20Framework%20for%20Disaster%20Risk%20Reduction%202015-2030,protect%20development%20gains%20from%20the%20risk%20of%20disaster>)



of data, technology and systems become critical in achieving the agenda listed in the disaster risk reduction roadmap.

Hon'ble Prime Minister Shri Narendra Modi has also highlighted a 10-point agenda (2016) for Disaster Risk reduction⁴ which is meant to increase investments towards global risk mapping, technology and academic research to enhance efficiency and capacity, utilising social media and mobile technologies, build on local initiatives and learning from disasters to improve international cohesion in disaster response with a focus on women's leadership. Clearly, the national and international commitments want an integration of Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR) efforts. In addition, such endeavours must have adaptive data-driven decision-making strategies and the ability to bounce back to normal.

The Assam cabinet has already approved a robust State Action Plan on Climate Change 2.0 that suggests spending of over Rs 1.03 lakh crore over 198 activities between 2022 and 2030 under 9 sectors targeting climate action and mitigation. The introduction of a comprehensive green budget will help track these activities. The DRR Roadmap 2022 aims at understanding disaster risk, and thereby working on its reduction and further investing in building resilience. In order to finance this initiative, the Assam cabinet has also approved the allocation of 3% of the State budget to it.

An activity such as the resilience budget statement will help target public spending and investment on the basis of comprehensive risk assessment and planning. This includes spending on infrastructure, adoption measures, rehabilitation and relief works.

⁴ [Prime Minister's Ten Point Agenda on DRR | NDMA, Gov](https://ndma.gov.in/Governance/PM-10-Agenda)
(<https://ndma.gov.in/Governance/PM-10-Agenda>)



Recommendations for Strengthening the Resilience Budget and DRR implementation

As part of the Assam Disaster Risk Reduction Roadmap 2030, the state has identified activities to be undertaken to improve the resilience of the state for 40 departments. This includes themes of critical infrastructure, social sector services, urban areas, livelihoods and building back better. At the same time, the State Action Plan for Climate Change 2.0 has also identified 21 key departments that need to work together to achieve the environmental sustainability and climate adaptation and mitigation goals of the state. It is important for departments to break out of silos and collaborate to achieve the targets set by DRR and SAPCC 2.0.

To ensure this, we suggest a few key steps be taken as part of strengthening the implementation of DRR:

1. Setting up a disaster risk reduction observatory

Access to coordinated, high-quality, and open data is key to disaster management and resilience efforts. This helps in:

1. Mitigation - Data for assessing risk levels using vulnerability, exposure and hazard data to reduce loss of resources along with management of historical data
2. Preparedness - Timely dissemination of Early Warnings from Early Warning Systems, development of disaster monitoring systems, status quo of climate and disaster resilient infrastructure, capacity building, planning for response and relief
3. Response - Data-driven response requires emergency communications for near real-time rescue operations, assessment of damages and needs for disbursement of funds, aids and resources



4. Recovery - Data-driven recovery demands mechanisms to monitor and manage the recovery, rehabilitation and reconstruction

Considering the climate vulnerabilities in Assam, there exists a need for a **one-stop, open data platform to share, track and evaluate all activities and expenditures made under various schemes (or programmes/programs) tagged under Resilience Budget 2023-24**. This should also integrate other near real-time machine-readable data sources and APIs like FIRMS ⁵by ASDMA, district reports and warnings by various DDMA's, related public procurement data from SPPP⁶ & Assam Tenders and other activities towards achieving Assam's DRR roadmap. This helps in the timely identification of disaster risks and will strengthen the collaboration among various stakeholders on the ground to timely mobilise support and relief efforts. Also, this will further ensure various target outcomes and agendas of the DRR strategy are achieved.

2. Setting up a Resilience Analytics, Data And Research lab (RADAR) at ASDMA

Data is central in identifying vulnerabilities, risks and opportunities in the various processes involved in disaster management. In line with National Data Sharing and Accessibility Policy (NDSAP) and **a data lab must be set up to ensure risk reduction and quick disaster response**.

It must have a multidisciplinary team working on **collating, standardising, triangulating, publishing and analysing various data sources** available from governmental and non-governmental stakeholders to better understand disaster risks, vulnerabilities, preparedness and response at various administrative levels in Assam.

⁵ ASDMA's Flood Reporting and Information Management System - FRIMS
(<http://www.asdma.gov.in/reports.html>)

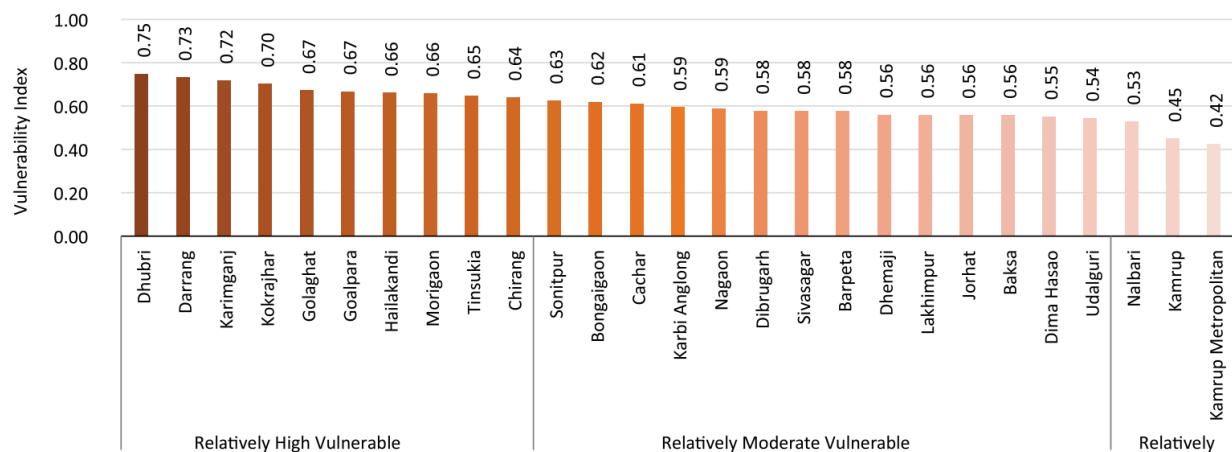
⁶ Assam State Public Procurement Portal - SPPP
(<https://sppp.assam.gov.in/>)



This should comprise ASDMA, line departments, Civil Society Organisations, academic institutions, startups, businesses and researchers who can look into how data, and AI, can be leveraged in the best way for climate risk reduction, and vulnerability assessment. This lab must also ensure **data standardisation and good data practices that will allow ease in operating with the data** for data-driven decision-making.

3. Need for Local Level Disaster Risk Reduction Roadmaps

The Climate Vulnerability Assessment for Adaptation Planning in India⁷ (Department of Science and Technology) reports that 10 districts are classified as “Relatively High Vulnerable” in the vulnerability index.



This calls for more enhanced and granular level planning and analysis with district risk reduction roadmaps developed and operationalized at village and revenue circle levels as well, accounting for other indicators such as flood proneness, demographic vulnerability, infrastructure access, flood impact and

⁷ [National Climate Vulnerability Assessment Report | Department Of Science & Technology](https://dst.gov.in/document/reports/national-climate-vulnerability-assessment-report) (https://dst.gov.in/document/reports/national-climate-vulnerability-assessment-report)

response in the district to build resilience and fiscal resources utilised. These can further help districts prioritise and strategize to implement the activities in DRR.

4. Need for monitoring and evaluation of schemes for the DRR objectives

With the varied list of objectives listed under the disaster risk roadmap, it is important for the Government of Assam to also monitor and evaluate the status and progress being made with the objectives listed.

This includes the identification of Key Performance Indicators (KPIs) that measure the quantity and quality of outcomes and outputs of the scheme, and the allocation of resources and objectives in line with the State Indicator Framework⁸ as well as other global frameworks for M&E.

This will also help the ASDMA and other stakeholders track if these objectives are being met within the timeline prescribed in the Disaster Risk Reduction Roadmap 2030.

About CivicDataLab

CivicDataLab works with the goal to use data, tech, design and social science to strengthen the course of civic-engagement in India. We work to harness the potential of open-source movement to enable citizens to engage better with public reforms. We aim to grow data and tech capacity of governments, nonprofits, think-tanks, media houses, universities etc to enable data-driven

⁸ [State Indicator Framework \(Department of Transformation and Development, GoA\)](https://transdev.assam.gov.in/sites/default/files/swf_utility_folder/departments/pnodd_medhassu_in_oid_2/latest/sif_assam_11feb2020_latest.pdf)
https://transdev.assam.gov.in/sites/default/files/swf_utility_folder/departments/pnodd_medhassu_in_oid_2/latest/sif_assam_11feb2020_latest.pdf



decision-making at scale. We work in three key sectors - Public Finance, Law & Justice and Urban Development.

Our Work in the space of Public Finance:

- 1. Open Contracting India:** [Open Contracting India](https://open-contracting.in/) is an initiative by CivicDataLab in partnership with [Open Contracting Partnership](https://open-contracting.in/) that aims at making public procurement processes in India more efficient, accessible and participatory. We do this by onboarding governments to international data standards for curating and releasing data, developing platforms to analyse their data for better decision-making, and creating case studies and resource material to understand the gaps and benefits of actions.
URL: <https://open-contracting.in/>
- 2. Intelligent Data Ecosystem for Assam- Flood Response and Management (IDEA-FRM):** In this project, we focus on identifying and collating the relevant data related to Assam floods, making them interoperable and publishing them in open access for better collective analyses and innovative solutions. We have collaborated with the stakeholders and co-created data-driven solutions to flood crises in Assam to develop a decision-making framework for authorities to ensure resource allocation to the most vulnerable areas to increase the preparedness levels of districts in Assam.
- 3. Assam Public Procurement Explorer:** A tool for exploring and analysing Assam's public procurement data for improved citizen engagement and better decision making by government officials. It hosts Assam's e-tenders data from the past six years, over 36,000 contracts, and allows users to easily search, download and analyse the public contracts data using key performance indicators.
URL: <https://assam.open-contracting.in/>



4. **Open Budgets India:** A comprehensive and user-friendly open data platform that can facilitate free, easy and timely access to relevant data on government budgets in India. The platform provides budget information of different tiers of government in India (Union Budget, State Budgets, budgets of several Municipal Corporations and Expenditure data from District Treasuries across the country) in an accessible and open format. Currently, the platform hosts 18K+ open datasets and numerous data visualisations on the platform.
URL: <https://openbudgetsindia.org/>
5. **India Data Platform:** India Data Platform (IDP), envisioned by MeitY & NIC, is a unified national data exchange and marketplace for India, encouraging all (government and private) stakeholders to share, find and use data without compromising on their business or social goals. CivicDataLab has been given the work order to implement the India Data Platform with NIC as an upgrade to Data.gov.in and the implementation of the draft National Data Governance Framework Policy.
6. **Himachal Pradesh Fiscal Data Explorer:** A unique tool where citizens can explore both budgets and spending data of Himachal Pradesh in an easy to comprehend and simple to use manner. It enables users to obtain answers to their budget-related queries in an interactive fashion. Some key features to assist the users in their exploration are downloadable data in machine-readable formats, easily searchable data tables, dynamic visualisations, etc. The platform has also gained recognition by the President of Taiwan as the work of excellence on public procurement and SDGs.
URL: <https://hp.openbudgetsindia.org/>
7. **Himachal Pradesh Procurement Index :** A standardised index to rank and compare districts in a state based on their performance. The procurement index comprises three indices: process efficiency, fiscal planning and participation promotion index. The index provides a



user-friendly solution to ranking different districts on their procurement processes, this is of particular use for governments, CSO's and the like. The data on Fiscal Data Explorer is available in public to be downloaded and reused and hence, the solution can be scaled to use the index across different organisations and states.

