GOVERNMENT OF BIHAR

DISASTER RISK REDUCTION ROADMAP (2015-2030)

(DISASTER MANAGEMENT DEPARTMENT)

ROADMAP DEVELOPMENT PROCESS, STRUCTURE & CONTENT

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PRESENTATION OUTLINE

1. **Process of Roadmap Development**
    a. **Drafting of Roadmap**

    b. **Validation workshop 8-9 January 2016**
2. **Roadmap Structure**
    a. **Evolution of Disaster Management landscape in Bihar**
    b. **Disaster Risk Profile of Bihar**
3. **Foundational Element of the Roadmap**
    a. **Resilience: the organising principle**
4. **Targets & Milestone**
5. **Specific Action**
    a. **Resilient Village**
    b. **Resilient livelihood**
    C. **Resilient Basic Services**
    d. **Resilient Critical Infrastructure**
    e. **Resilient Cities**
6. **Enabling policy structure**
7. **Implementation arrangement**
8. **Monitoring and evaluation**
9. **Reflection of Elements of the DRR Roadmap in Bihar development mission**

1. Process of Roadmap development- Phase I

3rd World Conference on Disaster Risk Reduction, Sendai

Adaptation of *Sendai Framework for Disaster Risk Reduction*

Decision for Bihar Conference on Disaster Risk Reduction (BCDRR)

Constitution of Organising Committee

First BCDRR

Drafting Committee formed

14th-18th March 2015

Mar-Apr-May, 2015

13th -14th May, 2015

18th May 2015

Contd. ….

SENDAI FRAMEWORK FOR DRR (2015-30)

1. Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 compared to 2005-2015.

2. Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 between 2020-2030 compared to 2005-2015.

3. Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030.

4. Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.

5. Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.

6. Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030.

7. Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.

Priority Area 1
Understanding disaster risks

Priority Area 2
Strengthening disaster risk governance to manage disaster risk

Priority Area 3
Investing in disaster risk reduction for resilience

Priority Area 4
Enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation and reconstruction
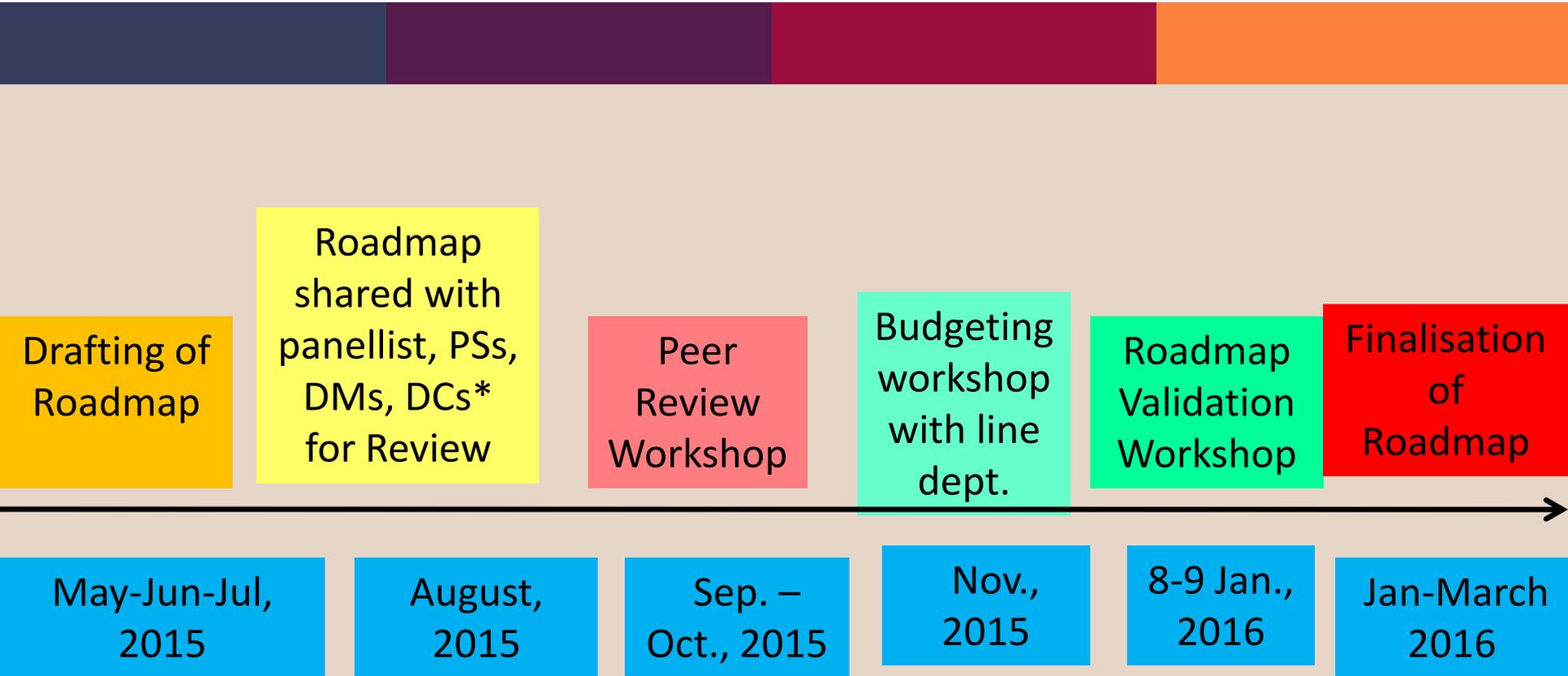
Four targets (1-4) has been adapted in Bihar DRR Roadmap

BCDRR (13th & 14th May 2015)

• Hon. Chief Minister of Bihar inaugurated the conference and released a 'Status Paper' on DM in Bihar

• 84 panellists and 550 participants discussed the issues and specific actions for Roadmap in 17 thematic sessions, which were anchored by 10 agencies from Bihar

• 18 papers submitted by experts and compiled as a compendium

• 'Patna Declaration' released by the Hon. Minister for Disaster Management

Process of Roadmap development- Phase II

Process of Roadmap development- Phase II

Drafting of Roadmap	Roadmap shared with panellist, PSs, DMs, DCs* for Review	Peer Review Workshop	Budgeting workshop with line dept.	Roadmap Validation Workshop	Finalisation of Roadmap
May-Jun-Jul, 2015	August, 2015	Sep. – Oct., 2015	Nov., 2015	8-9 Jan., 2016	Jan-March 2016

PS: Principal Secretary, DM: District Magistrate, DC: Divisional Commissioners

1 (a) DRAFTING OF ROADMAP

- The Drafting Committee, comprising members from DMD, BSDMA, UN Agencies, and Civil Society, met 15 times for deliberations on the Roadmap structure, framework and content

- Contributions were solicited and received from:
  - Newspaper advertisements,
  - Disaster Risk Management (DRM) Solutions Exchange community,
  - Panellists and Experts from BCDRR,
  - CSOs working in Bihar,
  - 18 Thematic Papers, and
  - Village Communities

- Drawing out learning from BCDRR sessions through analysis of session videos, session notes, and workshop report

- Review of pertinent policy and research documents in the state (MMV, Agriculture and Health Roadmaps, SDMP amongst others) and other relevant documents (such as Sri Lanka DRM Roadmap amongst others)

1.b VALIDATION WOKSHOP: 8th & 9th January 2016

- Objective: To review the key chapters of the DRR Roadmap and provide specific changes for finalization of the Roadmap.

- Inauguration by Hon'ble Chief Minister.

- Valedictory by Hon'ble Minister, Disaster Management Department, GoB.

- 125 experts participating in 8 Technical Sessions on 8 key components of the Roadmap viz. Resilient Villages, Resilient Livelihoods, Resilient Basic Services, Resilient Critical Infrastructure, Resilient Cities, Enabling Policy Architecture, Roadmap Implementation Arrangements, and Monitoring and Evaluation Mechanisms.

… CONTRIBUTERS TO THE ROADMAP

Panellists and experts

Officials from Government of Bihar

Members of the Civil Society
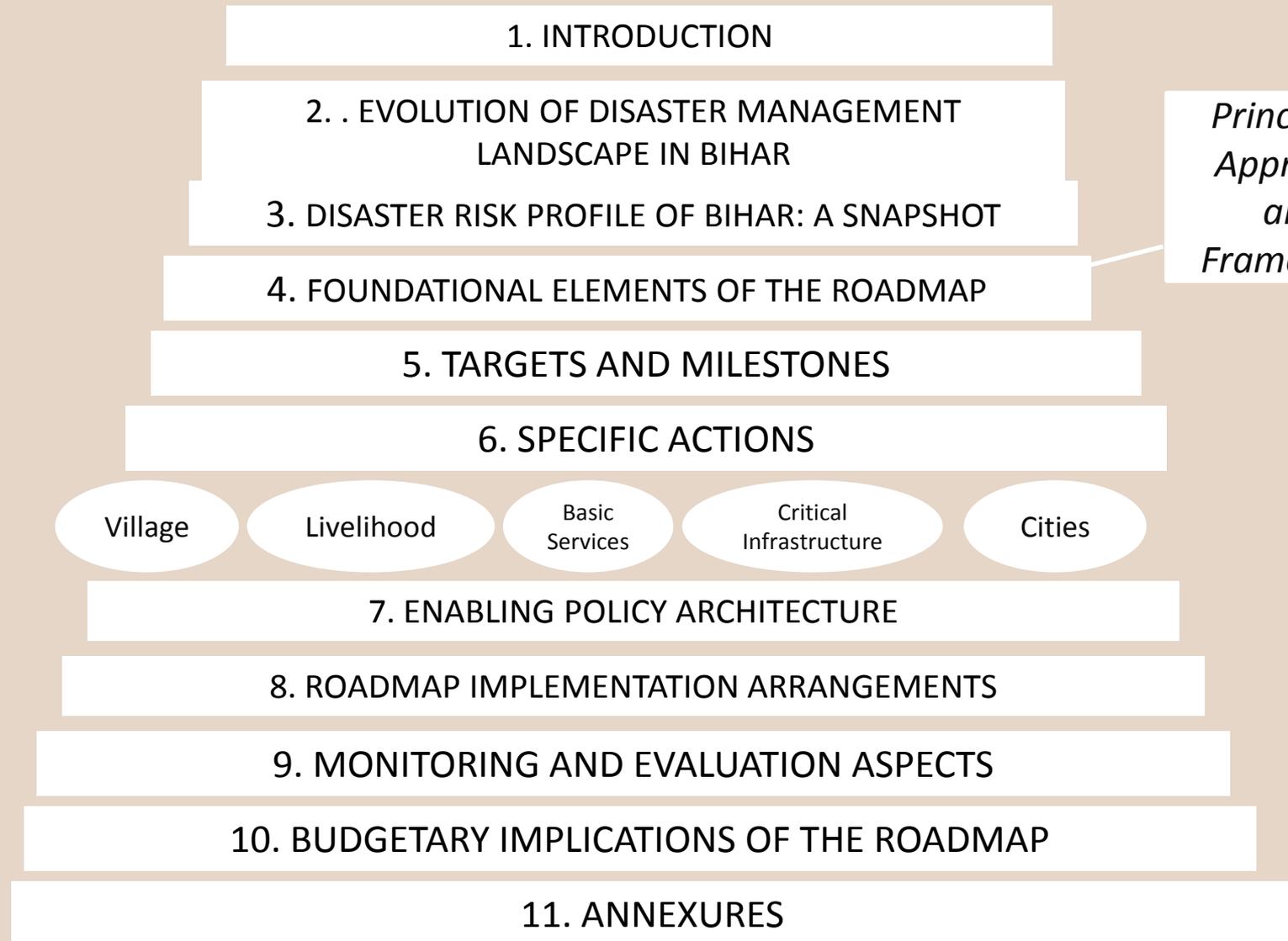
Members of UN Agencies

Village Communities

Bihar DRR Roadmap 2015-2030

Practitioners of DRM

Citizens of Bihar

2. ROADMAP STRUCTURE

1. INTRODUCTION

2. . EVOLUTION OF DISASTER MANAGEMENT LANDSCAPE IN BIHAR

3. DISASTER RISK PROFILE OF BIHAR: A SNAPSHOT

4. FOUNDATIONAL ELEMENTS OF THE ROADMAP

Principles, Approach and Framework

5. TARGETS AND MILESTONES

6. SPECIFIC ACTIONS

- Village
- Livelihood
- Basic Services
- Critical Infrastructure
- Cities

7. ENABLING POLICY ARCHITECTURE

8. ROADMAP IMPLEMENTATION ARRANGEMENTS

9. MONITORING AND EVALUATION ASPECTS

10. BUDGETARY IMPLICATIONS OF THE ROADMAP

11. ANNEXURES

2 (a) EVOLUTION OF DISASTER MANAGEMENT LANDSCAPE IN BIHAR

Policies and Programmes

Norms of assistance passed SOP for Flood Disaster Management approved Directives regarding fire, cold wave, hail storm and lightening related losses issued

SEC Constituted; BAPEPS formed; Relief, Response, Reconstruction and DRR programmes launched by many national and international civil society organisations

1st SDMP finalised; State Disaster Mitigation Fund created; SOP for AES, Fire and Hospital Safety, Mass Casualty Management and Flood Management (WRD) approved

1st BCDRR; SOP for Drought approved; Earthquake Safety Clinic and Centre started; MSSP launched with 1st School Suraksha Pakhwara

Bihar State Disaster Management Act; Dept. of DM constituted

BSDMA Constituted (notified in 2007)

Separate Department for Disaster Relief

IAG Informally Constituted

National DM Act adopted by Bihar state

FMISC Constituted

Shatabdi Anna Kalash Yojana initiated; SOP for Drinking Water Scarcity approved

Centre for Disaster Management constituted in BIPARD

SDRF Constituted

Safety Weeks Initiated

Refined Building Code and By-laws passed

SOPs for MCM and Drought being formulated

| 1978 | 1987/88 | 2002 | 2004 | 2005 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |

Munger Earthquake (1934)

Large-Scale Floods & Earthquake

Large-scale floods in 18 districts, drought in 20 districts

Drought

Large-Scale Floods

Kusaha Breach leading to large scale floods

Drought

Drought

Earthquakes in Nepal and Aftershocks; Hailstorm and Cyclonic Storm

Large-Scale Floods Unmanageable by Single Actors

434 houses were destroyed in fire incidences across the state

2.(b) DISASTER RISK PROFILE OF BIHAR

• The hazard profile of the state makes it literally the House of Hazards ⟶ Multi-hazard prone

➢ the whole of State is earthquake prone ⟶ Seismic Zone III, IV, V

➢ over 70% of the area flood prone ⟶ Rivers originating in Nepal & India criss-crossing Bihar

➢ over 30% of the area drought prone and

➢ High speed wind prone, Cyclonic storm prone, fire incident prone & gale/hailstorm prone.

➢ Boat tragedies/ drowning

➤ **Earthquake**

Total 21.1% area of Bihar in Zone IV
Total 63.7% area of Bihar in Zone IV
Total 15.2% area of Bihar in Zone V
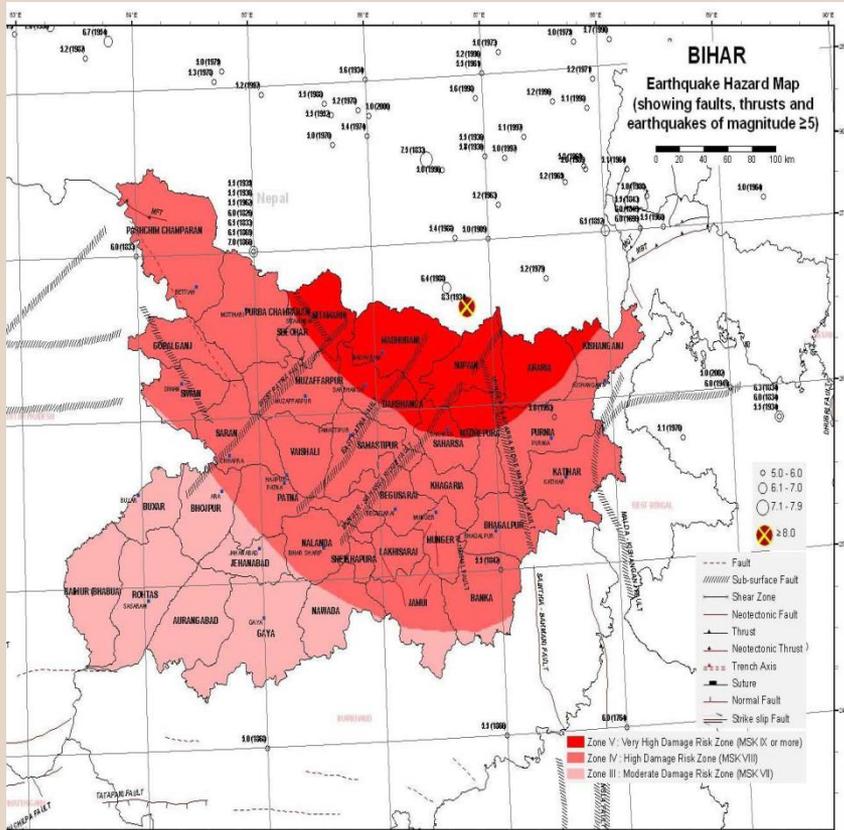
➢ **Flood**— **Most Vulnerable : 15 districts**
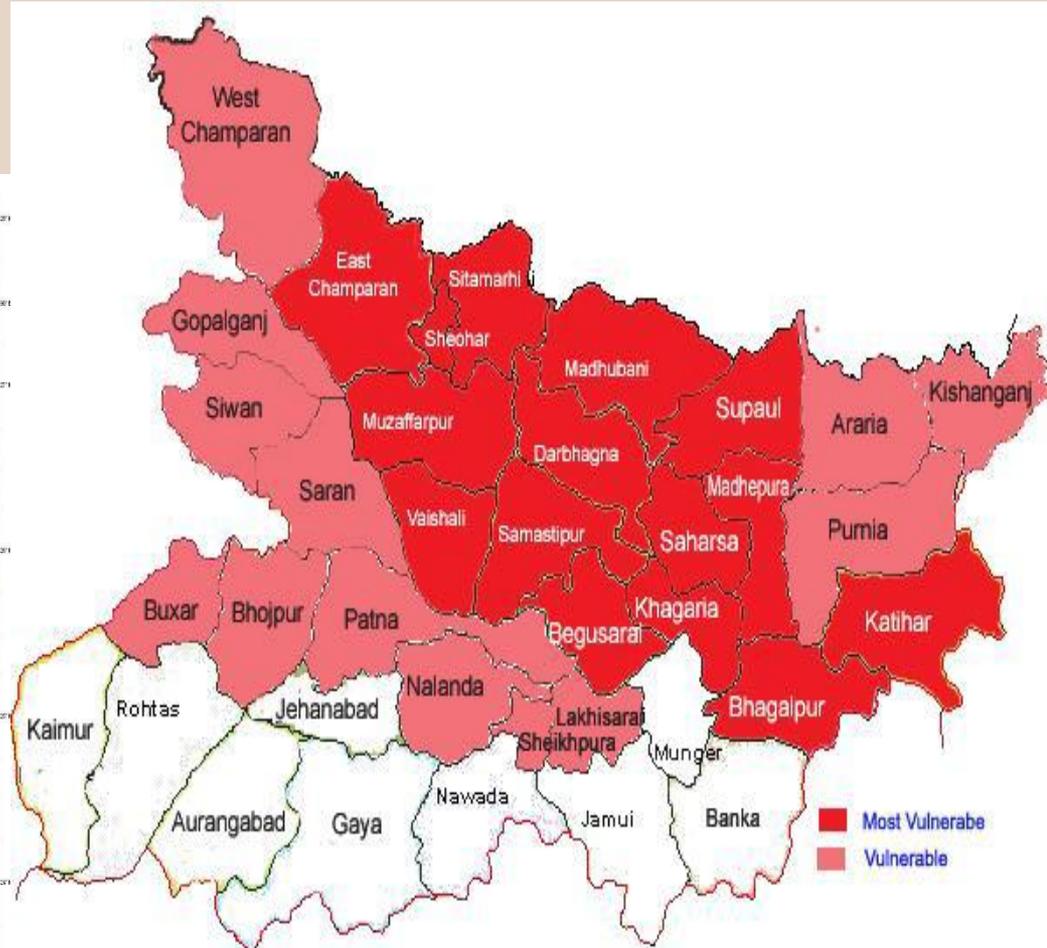
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➤**Drought** — Most Vulnerable Districts : Gaya, Nawada Jamui, Nalanda, Lakhisarai Prone District : Jahanabad, Arwal, Aurangabad Kaimur, Bhojpur, Buxar, Rohtas, Banka

➤**High Speed Wind** — Around 86% of area of Bihar prone to cyclone of 47 m/s /Gale /Hail Storm intensity
— Around 14% of area of Bihar prone to Cyclone of lesser intensity

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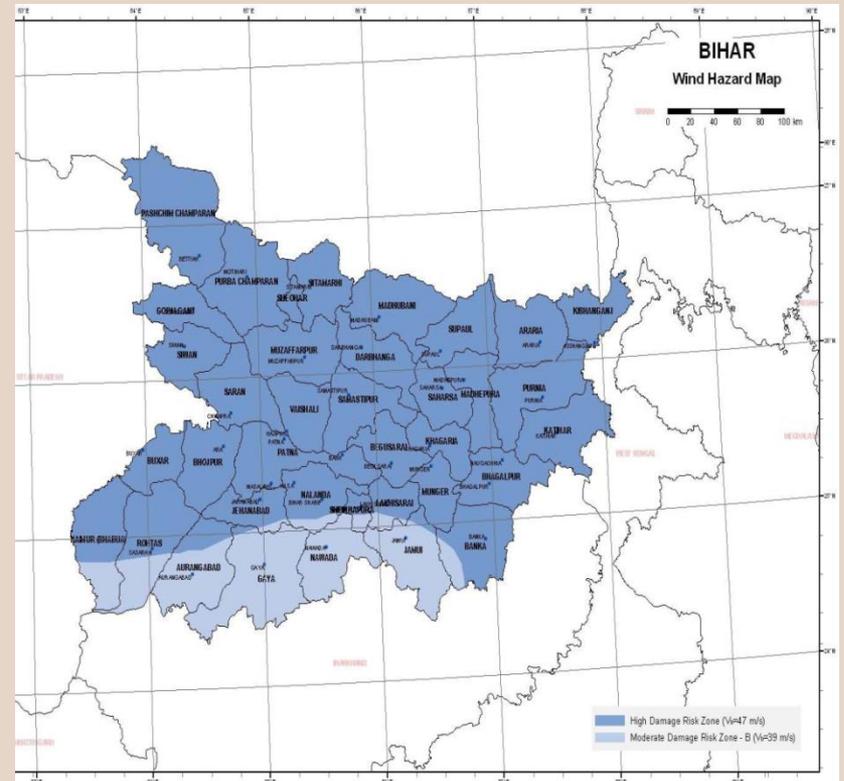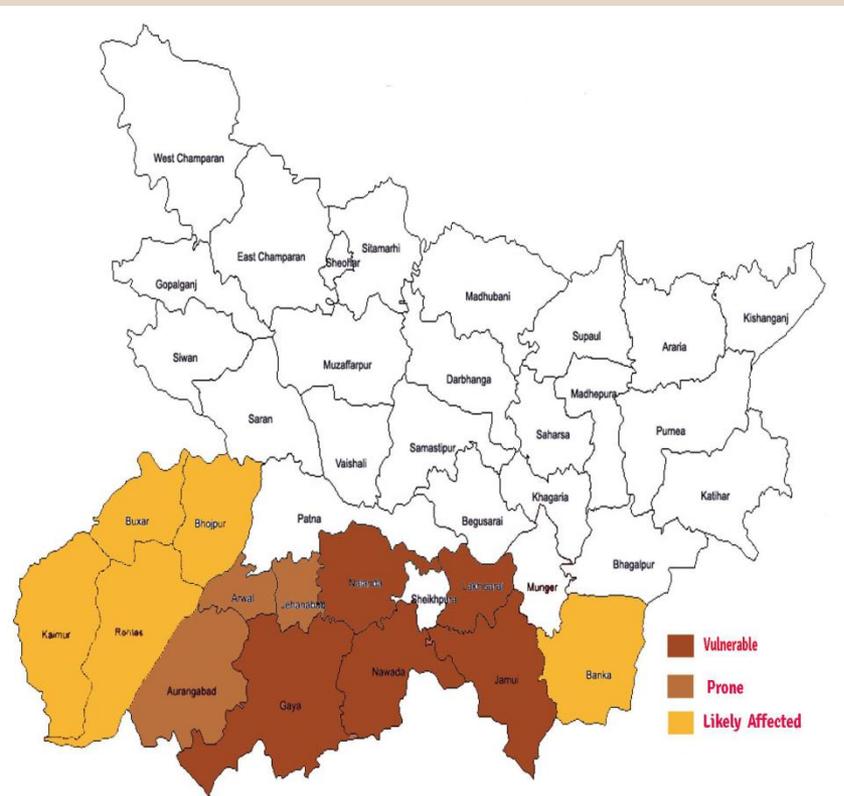
DISASTER RISK PROFILE OF BIHAR: A SNAPSHOT
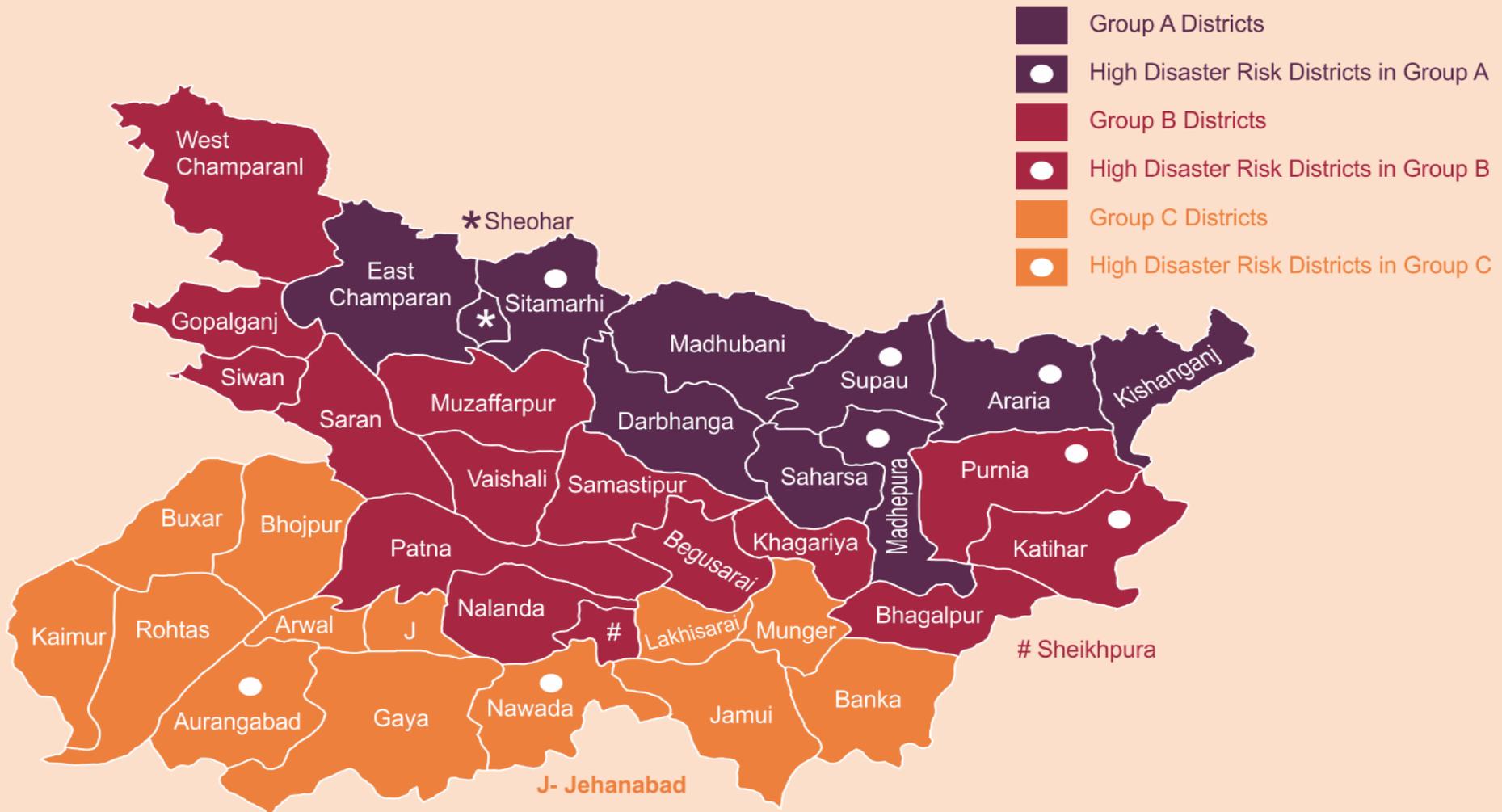
3. FOUNDATIONAL ELEMENTS OF THE ROADMAP

- 15 Guiding Principles
  - Primacy of rights of at-risk communities
  - Partnerships
  - Participation, Inclusion
  - Resilience in Development

- Approach of Implementation
  - Multi-hazard focus
  - Phasing

- Framework
  - Resilience as the organising principle, goal and means
  - FIVE components – communities and systems

3(a) Resilience : the organising principle

Challenge: How should the specific actions be organised in the DRR Roadmap?

Hazard-wise

SFDRR 7 Targets and/or 4 Priorities

Stages of DRM – Preparedness, Response, Mitigation, Recovery, Rehabilitation

Nature of Action – Policy, Capacity Building, Public Education etc.

Actors and levels of action

Sector/ life aspect impacted by disasters – Health, Education etc.

Geography, Temporal (short term, medium term, long term)

Resilient Entities

Which entities would have to be resilient to achieve the goal of resilient Bihar?

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4. TARGETS AND MILESTONES

4 TARGETS

1. Lives lost due to natural disasters in Bihar would be reduced by 75% of the baseline level by 2030.

2. Lives lost due to transportation related disasters (viz. road, rail and boat accidents) in Bihar would be substantially reduced over baseline level by 2030.

3. People affected by disasters in Bihar would be reduced by 50% of the baseline level by 2030.

4. Economic loss due to disasters in Bihar would be reduced by 50% of the baseline level by 2030.

17 MILESTONES

- Short term (2020), Medium term (2025) and Long term (2030)

- Planning-related, Policy-related, Systems-related, Risk analysis-related

5. SPECIFIC ACTIONS

- FIVE Components
- Conceptualisation
- Characteristics
- Actions: Levels and Types

Resilient Village and Resilient Cities

Risk Recognition, Analysis and Risk-Informed Planning

Risk Reduction Measures (Hazard Specific)

Preparedness for Effective Response

Capacity Building

Communication & Awareness

Resilient Livelihood, Resilient Basic Services and Resilient Critical Infrastructure

Overarching

Service Delivery Continuity Plans

Preparedness, Response Recovery

Capacity Building

Communication & Awareness

5 (a) RESILIENT VILLAGE

Conceptualisation: Dynamic and proactive social unit capable to assess, address and recover from disasters

Major Characteristics

1. Individuals, groups and communities are aware and recognize the risk.

2. Safe behaviours and practices

3. DRR is mainstreamed in GP plans

4. Vibrant community institutions for risk analysis, communication, preparedness, response and reduction

5. Ability to manage small-scale disasters

6. Access to early warning and emergency services

5 (b) RESILIENT LIVELIHOODS

<u>Conceptualisation:</u> **interplay of means, activities and entitlements by which livelihood practitioners anticipate, cope and recover from disasters and Climate Change**

Major Characteristics

1. **Sustainable, risk-informed livelihood choices and context-specific production practices**

2. **Diverse sources of income coming from a wider livelihood basket**

3. **Capacities and opportunities to recover from shocks and stresses**

4. **Plan for ensuring the continuity of markets, supply chains, pertinent financial products, and temporary sources of income in case of disasters**

5. **Access to raw materials/inputs, financial inclusion, backward and forward linkages, and means for processing and marketing for quick recovery**

6. **Migration is only by choice, is safe and not forced**

7. **Safeguarding the livelihoods of marginalised group**

5 (c) RESILIENT BASIC SERVICES

Conceptualisation: 7 services (WASH, Food &Nutrition , Health, Education, Housing, School Safety Programme , Emergency Support Function) which are capable of efficacy in non-disaster times, effective during disasters and recover

Major Characteristics

1. Rights and duties of citizens and line departments

2. Risk-informed annual plans

3. Service Delivery Continuity Plans

4. Pre-positioning

5. Capacities

6. Flexibility in policies and programmes for differential planning

5 (d) RESILIENT CRITICAL INFRASTRUCTURE

<u>Conceptualisation</u>: 6 bundles (Roads and Bridges, Telecommunications, Power, Dams and Embankments, Transport Systems and Hazardous Industries) which are capable of efficacy in non-disaster, effective during disasters and recover from disasters through BBB

<u>Major Characteristics</u>

1. Rights and duties of line departments, services providers and users

2. Risk-informed annual plans

3. Construction of CI does not create/ worsen disaster risks

4. Business continuity plans (BCPs)

5. Capacities

5 (e) RESILIENT CITIES

Conceptualisation: Dynamic and proactive social unit capable to assess, address and recover from disasters

Major Characteristics

1. Citizens' and communities' rights and duties

2. Land zoning and urban planning is risk-informed

3. Safe behaviours and practices

4. DRR is mainstreamed in ULB plans

5. Vibrant community institutions for DRR

6. Ability to manage small-scale disasters

7. Access to early warning and emergency services

6. ENABLING POLICY ARCHITECHTURE

DRR Roadmap aims to steer the policy architecture of the state further towards strengthening DRR by creating an enabling environment of funds, functions and functionaries for DRR as well as mainstreaming DRR in development through :

- Legal Amendments
- Development of Policies
- Directives for planning and resource allocation
- Guidelines and Manuals
- Norms
- SOPs
- Programmes

7. IMPLEMENTATION ARRANGEMENTS

- Existing Institutions

- Proposed Institutions/mechanisms

- Personnel

- Programmes and Systems

8. MONITORING AND EVALUATION

Institution	Focus and means of monitoring	Frequency
CMG, headed by CS	• Strategic Review (Line Departments' presentations)	• Annual
Special Task Force, headed by PS-DMD	• Annual Resilience Report Card • Progress review of Resilient Village and City Programmes • On-site stock-taking of select key interventions (for e.g. actions related to capacity building, resilient village and cities programmes, school safety, risk analyses, GP & ULB planning, risk proofing livelihoods, and departments' risk reduction measures) by the team • Review of SOPs and guidelines • Sharing of progress through BCDRR • First mid-term Evaluations of Roadmap Implementation • Second mid-term Evaluations of Roadmap Implementation • End-term Evaluation	• Annual • 6 monthly • 6 monthly • Post-event • Biennial • 2022-23 • 2026-27 • 2030
Line Departments, headed by respective PS'	• Review of plans for: risk analysis, risk-informed actions and Service Delivery / Infrastructure Continuity Planning (SDCP / ICP) • Appraisal of implementation of risk-informed developmental planning and related actions and additional risk reduction initiatives undertaken from the Roadmap • Review of SDCP / ICP	• Before approval of plans • As part of routine monitoring • Post-event
Roadmap Implementation Support Unit (RISU)	• Development of baseline for targets • Tracking the progress against the baseline • Management of data of the roadmap implementation • On-site monitoring of specific actions • Development and sharing of analytical reports	• 2015-16 • Ongoing • Ongoing • Quarterly • Half-yearly

Cont……..

DDMA, headed by DM	• Review of district plans of departments for: risk analysis, risk-informed actions and BCP • Review of DDMP • Review of Resilient Village and City Programmes • District Resilience Report Card	• Annual • Annual and Post-event • 6 monthly • Annual
BDO and SDM	Review of Resilient Village and City Programmes	Quarterly
GP / ULB	• Review of plans for risk analysis and risk-informed actions • Assessment of implementation of risk-informed actions additional risk reduction initiatives undertaken from the Roadmap • Social audit of the DRR actions by *Gram Sabha* / ULB general body meeting	• Quarterly • Bi-annual • Annual
CSOs	Participation of CSOs in all the above mentioned monitoring and evaluation activities.	
Experts / Agencies	Participation in the periodic review and evaluations of this DRR Roadmap	

10. ELEMENTS OF THE DRR ROADMAP IN BIHAR DEVELOPMENT MISSION

- The Government of Bihar has notified "**Bihar Development Mission**" to accelerated the development process through fast track decision making processes in time bound manner.
- Mission has seven resolves and seven submission to be implemented in mission mode to ensure faster execution of seven resolves of the government in next five years

Seven Resolves (SAAT NISHCHAY)

1. Empower the youth of Bihar and make them self-sufficient
2. Women empowerment and to make them more self-reliant
3. Electricity connection is secured for each household.
4. Piped water would be made available to all homes
5. All weather roads reach each and every doorstep
6. Each household would be equipped with a toilet
7. Expand the opportunities for technical and higher education in the state

- **Seven sub-missions focusing on**

  ✓ **Youth**
  ✓ **Drinking water sanitation , Development of villages and cities**
  ✓ **Human Development**
  ✓ **Agriculture**
  ✓ **Industries and occupation**
  ✓ **Infrastructure**
  ✓ **Communication and Brand Bihar**

  The operational leadership for the implementation of this Roadmap would proactively engage with the operational leadership of flagship initiatives in the state like the Bihar Development Mission (BDM) that has been initiated for fulfilment of the State Government "Seven Resolves" (Saat Nischay).

THANK YOU ....