"Developing DRR Strategies & Plans for Implementing SFDRR"

– Initiatives by Government of Bihar

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Presentation Outline:

Overview and Disaster Risk Profile of Bihar

Overview of Bihar and Disaster Risk Profile:

❑ 3rd most populous state in India with over 110 million population.

❑ Most densely populated state (1106/sq. km).

❑ Growth performance of Bihar economy has been steady in the recent decade.

❑ During 2005-06 to 2014-15, the GSDP grew annually at 10.52%.

❑ Present government's focus is *"Development with Justice"*.

❑ Government has set- up "*Bihar Vikas Mission*" (Bihar Development Mission) to advance the sustainable development in the state.

❑ Seven Resolves '*Saat Nischay*' – State government priority

❑ State with a separate Disaster Management Department and a fully functional SDMA

❑ Mostly rural and multi-hazard prone State
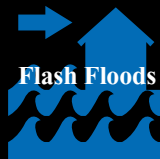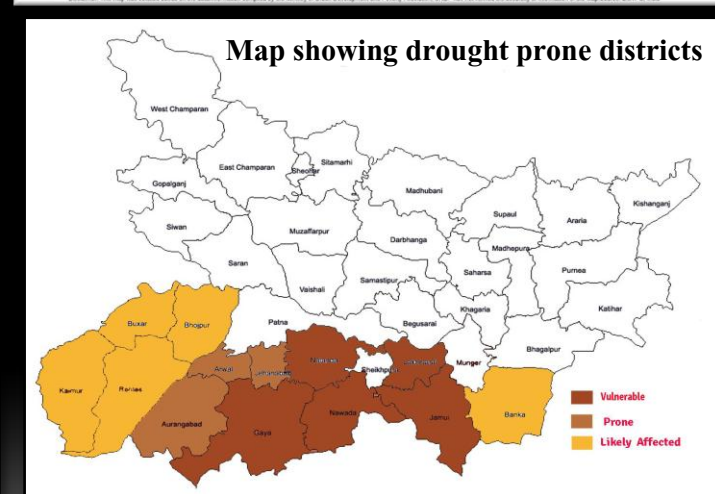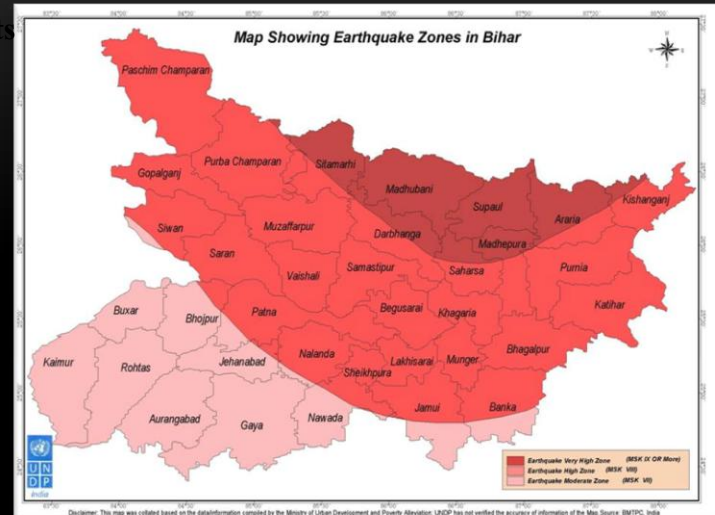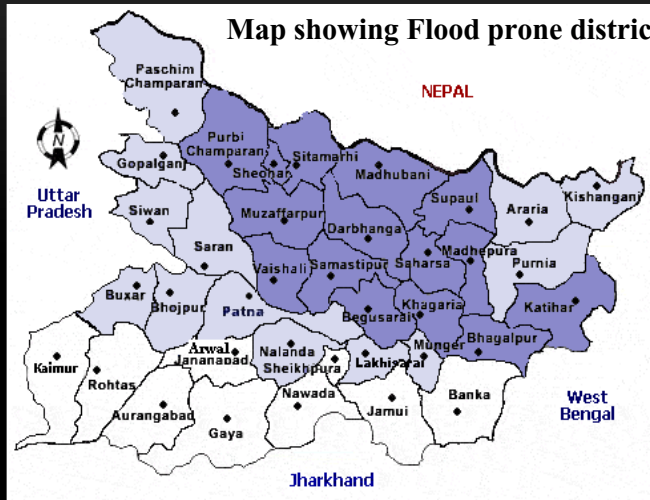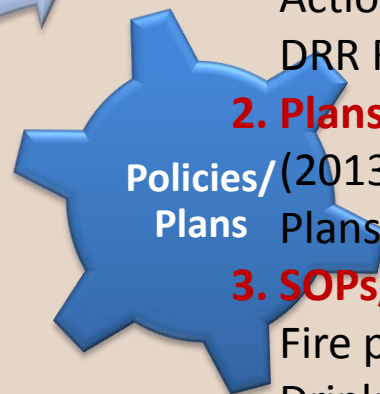
MULTI- HAZARD PROFILE OF BIHAR

Fire incidents, Road accidents, climate induced disasters: flash floods, irregular and unseasonal rains, and health emergencies

Disaster Risk Governance, Bihar

1. **Crisis Management Group (CMG)**
2. **State Executive Committee (SEC)**
3. **Bihar State Disaster Management Authority (BSDMA)**
4. **Disaster Management Department**
5. **Roadmap Implementation Support Unit (RISU)**
6. **District Disaster Management Authorities (DDMA)**

Institutions for disaster risk management

1. **Policies:** Bihar State Disaster Management Policy (2007), Bihar State Action Plan on Climate Change (2015), DRR Roadmap for 2015-2030 (2016)
2. **Plans:** State Disaster Management Plan (2013), District Disaster Management Plans in all the 38 districts
3. **SOPs/ directives:** Flood Management, Fire prevention, Drought Management, Drinking Water Crisis, Fire safety in Hospitals and Heat Action Plan
4. **Financial Management:** State Disaster Response Fund and State Disaster Mitigation Fund

Policies/ Plans

DRM Initiatives

1. **Capacity Building**
2. **Infrastructure, materials and equipment**
3. **Public Awareness and Education**
4. **Risk Assessments**

Alignment with global DRR Frameworks

– **Development of Bihar DRR Roadmap, 2015 - 2030**

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

Bihar DRR Roadmap 2015 - 2030:

1. Bihar is probably first State in India, and one of the first regional government in the world to develop a comprehensive DRR Roadmap at the sub- national level immediately after the WCDRR in 2015.

2. Drafting of DRR Roadmap was a very extensive consultative process.

3. DRR Roadmap was developed over a period of 12 months between April, 2015 to March, 2016 through multi-stakeholder and multi-level consultative process.

4. DRR Roadmap is aligned with three global agreements signed in 2015 i.e. Sendai Framework (SFDRR), the SDGs and Paris Climate Agreement.

5. **Salient features of DRR Roadmap are:**
   - **Framed around time bound targets and milestones**
   - **Actor-specific actions**
   - **Contextualisation of SFDRR for Bihar and concept of resilience unpacked**

Process of Roadmap development:

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 & Preparation to hold 1st BCDRR

First BCDRR

DRR Roadmap Drafting Committee formed (DMD, BSDMA, UNICEF and Civil Society)

14th-18th March 2015

Mar-Apr 2015

13th -14th May, 2015

18th May 2015

Contd. ….

Process continues……………

Drafting of Roadmap

Contributions received from:
- Experts from DM field,
- All the line departments,
- CSOs working in Bihar,
- 18 Thematic Papers,
- Village Communities
- Newspaper advertisements,

Draft shared with panellist, BSDMA, PSs, DMs, DCs* for coments

Peer Review Workshop with line Deptts

Roadmap Validation Workshop

Cabinet approval of DRR Roadmap

| May-Jun-Jul, 2015 | August, 2015 | Sep. – Oct., 2015 | 8-9 Jan., 2016 | April, 2016 |

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

Vision
Disaster Resilient Bihar

Targets and Milestones

Foundation Elements – Principles, Approach and Organising Framework

Resilient Villages	Resilient Livelihoods	Resilient Basic Services	Resilient Critical Infra-structure	Resilient Cities
Specific Actions, Responsible Actor And Timeline	Specific Actions, Responsible Actor And Timeline	Specific Actions, Responsible Actor And Timeline	Specific Actions, Responsible Actor And Timeline	Specific Actions, Responsible Actor And Timeline

Enabling Policy Environment

Implementation Arrangements

Monitoring and Evaluation Aspects

Budgetary Implications

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.

MILESTONES:

<u>BY 2020</u>:
1. Baseline status for each of the four targets is developed.
2. Training of Engineers, Architects, Masons etc. for safe construction of projects and buildings completed.
3. Structural safety audits of all government offices/ buildings and infrastructure (such as Secretariat, Collectorate, SDO/Block/Anchal Offices, Police Offices and Stations, Schools, Hospitals, Panchayat Bhawans, Anganwadi centres etc.) is completed and corrective measures initiated.
4. Safe construction of all major Government projects and building is initiated.
5. Emergency Support Functions are notified and made operational with fully-functional Emergency Operations Centres (EOCs) at state and district levels.
6. Structural safety of all commercial buildings (such as malls, cinema halls and other public places of mass gathering) is ensured.
7. Comprehensive multi-hazard risk analysis (current and emerging disaster risks) and incorporating in annual plans and PIPs of all line departments and annual plans of PRIs and ULBs.

MILESTONES:

BY 2020:

8. Service Delivery Continuity Plans (SDCPs) and Infrastructure Continuity Plans (ICPs) for all basic services & critical infrastructures - to ensure department functions return to 'business as usual' in the quickest time.

9. An effective Early Warning System (EWS) is established, wherein all villages and cities in Bihar have systems for early warning information reception, dissemination and taking up immediate good enough pertinent action.

10. DDMAs strengthened with resources, mandates and capacities for playing an integral role in disaster risk reduction decision making at the district level.

11. Communities understand and practice 'do's and don'ts' during disaster situations as a result of a state-wide public awareness and education campaign launched at all levels.

12. Building bye-laws incorporating safe construction in all urban areas are approved.

13. Communities are encouraged and a policy regime is developed to enforce safe construction in rural areas.

MILESTONES:

BY 2025:
1. Corrective measures, including retrofitting, for ensuring structural resilience of all government offices and social infrastructure are completed.
2. A system for Risk Informed Development Planning (RIDP) is adopted and operational in the state at all levels of planning.
3. All PRIs and ULBs are adequately empowered through funds, functions and functionaries to ensure resilience.
4. Communities in all villages and cities regularly monitor current and emerging disaster risks, including underlying risks, and assert for measures to be taken to address the same.
5. Platforms and mechanisms are institutionalized across Bihar for effective learning and sharing on DRR planning, implementing and drawing learning.

MILESTONES:

BY 2030:

1. Policies and practices for agriculture and other livelihood related risk transfer, sharing, and compensation are adopted by agriculture and small industry based livelihoods systems in Bihar.
2. Rural and urban habitat planning processes like land zoning, town and city development planning take into account existing and emerging disaster risks.
3. All existing and new public and private buildings in Bihar are structurally safe from a multi-hazard perspective.

Foundational Elements of Roadmap:

1. 15 Guiding Principles:
   - Primacy of rights of at-risk communities
   - Partnerships
   - Participation, Inclusion
   - Resilience in Development
2. Approach of Implementation:
   - Multi-hazard focus
   - Phasing
3. Framework:
   - Resilience as the organising principle, goal and means
   - FIVE components – communities and systems

Specific Actions for each departments:

- Specific Actions has been arranged department/ agency wise.
- Nodal department/ agency will lead the activities whereas supporting departments would provide requisite support to nodal department
- Level of action (State, District, Block, and Gram Panchayat or Urban area) and the timeline (short-term, medium term and long- term) for each specific activity has been identified.
- Each department/ agency has to make budgetary provisions for the assigned activities in their annual budget; DMD can supplement funds if some of the activities can't be budgeted by the departments/ agency.
- Actions divided into short, medium and long terms aligned with the milestones

New Policies/ Programmes envisaged:

So as to facilitate implementation of Bihar DRR Roadmap

1. **Legal Amendments:** PRI act & ULB Act
2. **Develop policies:** Disaster Recovery Policy, Livelihood Recovery Policy, Water Management Policy, Waste Management Policy, Climate Change Adaptation Policy
3. **Notify the Emergency Support Functions (ESF)**
4. **Guidelines/ manuals/ directives**
5. **SOPs on** Earthquakes, Cyclonic Storms, Crowd Management, Debris clearance, dignified disposal of dead bodies and animal carcasses, Functioning of State and District Emergency Operation Centres
6. **Programmes:** Resilient Village programme, Resilient City programme and Chief Minister School Safety programme.

Proposed Institutions:

So as to facilitate implementation of Bihar DRR Roadmap

1. **Roadmap Implementation Support Unit (RISU):**
    Established in DMD, with dedicated technical experts to support implementation and monitoring of DRR Roadmap (Supported by UNICEF, ADPC/ BMGF).
2. **State Institute for Disaster Management (SIDM):**
    Proposed to be established to function as the nodal state level capacity building, research, study cum resource centre on disaster management and risk reduction.
3. **State Platform for DRR (SPDRR)** –on the lines of NPDRR. For stocktaking on the implementation of the DRR Roadmap.
4. **State Level Task Force:** Formed & led by Minister Disaster management for coordination and stocktaking of the implementation of Roadmap.
5. **Disaster Management Information System:** data collation, analysis and reporting on progress.

Political Commitment

"राज्य के खजाने पर आपदा-प्रभावितों का पहला हक है..."

(The disaster affected people have the first right on the state's treasury...)

Shri Nitish Kumar, Hon'ble Chief Minister, Bihar in his inaugural address of the Bihar Conference on Disaster Risk Reduction (BCDRR), Patna, Bihar, 13th - 14th May 2015.

Role of Nodal departments & other agencies in implementing SFDRR

Guiding Principles of DRR Roadmap:

Polycentric Governance:

- DRR is the primary responsibility of the government; yet, it <u>will not rest with any one department i.e. like Disaster Management Department alone</u>.

- DRR is a multi-stakeholder and multi-level, hence implementation of the same will be undertaken by all the line departments, academic institutions as well as non-government institutions.

Implementing /Supporting Departments/ Agencies for Roadmap:

1. Disaster Management Department
2. Bihar State Disaster Management Authority
3. District Disaster Management Authority
4. Health Department
5. Agriculture Department
6. Animal Husbandry & Fisheries Department
7. Cooperative Department
8. Food & Consumer Protection Department
9. Education Department
10. Public Health Engineering Department
11. Bihar Institute of Public Administration
12. Industries Department
13. Labour Resource Department
14. Building Construction Department
15. Water Resource Department
16. Department of Environment & Forest
17. Finance Department
18. Information & Public Relation Department
19. Urban Development Department
20. Rural Development Department
21. Jeevika
22. Panchayati Raj Department
23. Home Department (Fire Services & Traffic)
24. Transport Department
25. Road Construction & Rural Works Department
26. Social Welfare Department
27. Energy Department
28. Revenue and LR Department
29. INGOs/CSOs

Roles of Scientific and Technical Community:

- Scientific and technical community have been part of the process of DRR Roadmap development and have provided strong inputs in drafting of the DRR Roadmap.
- Scientific and technical community are included as members of various advisory bodies formed by BSDMA to provide need-based technical guidance in planning and implementing DRR Roadmap.
- Scientific and technical community are engaged in the formulation of policies, strategies and plans as envisaged in DRR Roadmap.
- In the recent years BSDMA engaged Scientific and technical community in air pollution study, urban flooding, drafting of heat wave action plan, Road Safety and disaster resilient constructions etc.
- BSDMA has standing partnerships with NIT, Patna, IIT Kanpur, ICIMOD etc.

Measuring Damage and Loss

1. DRR Roadmap has 4 targets and 21 milestones towards the achievement of 'Resilient Bihar'.
2. Roadmap has identified Monitoring and Evaluation aspects of the same. This includes development of a baseline to enable the measurement of progress towards the envisioned goal.
3. Developing a baseline for a 15-year Roadmap is both a critical as well as a challenging exercise, owing both to the temporal expanse as well as the geographical and disaster risk profile of Bihar,
4. Baseline status for each of the 4 targets is being developed.
5. DMD is working to develop Disaster Management Information System (DMIS) jointly with NDMA.

Monitoring progress of DRR implementation

Monitoring and Evaluation:

Institution	Focus and means of monitoring	Frequency
BSDMA (in annual meetings headed by Hon'ble CM)	Strategic Review (Presentation by DMD)	Annual
CMG/SEC	Review (Line Departments' presentations)	6 monthly
State Task Force, headed by Hon'ble Minister- DMD	• Coordination among line departments/ agencies • Support to line departments and agencies • Stocktaking of implementation of Roadmap	Quarterly
Line Departments, headed by respective PS	• Review of action plan for implementation • Internal Review of status of implementation of specific tasks assigned to them	Bi-monthly
Divisional Commissioners	• Review of department's plan for risk analysis, risk-informed actions and actions taken to perform the specific tasks at the district level • (All DMs and divisional level heads of line departments to participate. Chairmen of District Boards and Mayors of ULBs as special invitees)	Group A & B dist.:- Bi-Monthly Group C dist.: Quarterly

Monitoring and Evaluation:

Institution	Focus and means of monitoring	Frequency
DDMA, headed by DMs	• Review of departmental plans and actions taken Review of DDMP • Review of Resilient Village and City Programmes • All SDOs/BDOs/Cos/Pramukhs of Panchayat Samitis/ Ward Commissioners of ULBs and CSOs shall participate. Chairman of District Board and Mayor of ULB shall be special invitee)	Group A & B dist.:- Bi-Monthly Group C dist.: Quarterly
SDOs	Review of Resilient Village and City Programmes/DDMP/VDMP (All BDOs/COs/Mukhiyas of GPs and CSOs shall participate)	Group A & B dist.:- Bi-Monthly Group C dist.: Quarterly
GP / ULB	GPs may be invited in review meetings at SDO level	
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	

Capacity Building approaches across various levels

1. **Training and Capacity Building of a wide range of state and non- state stakeholders**

2. **Public Awareness and Education**

3. **Programme for reaching to community and Children**

4. **Partnerships and leveraging of opportunities**

1. Training and Capacity Building

1. Training of Engineers, Architects, Contractors and masons on Safe and earthquake resistant construction and on-site demonstrations.
2. Training of Boatmen, boat owners and boat surveyors on Boat Safety.
3. Training of Government Officers of state and district level on DRR &M.
4. MM School Safety Programme: "Safe Saturdays"
5. Capacity Building of PRI representatives: Panchayats, ULBS
6. Capacity building of Vet Doctors on "Management of Animals in Emergencies"
7. Training of Medical Doctors, Staff and Police personnel to act as QMRTs during emergencies
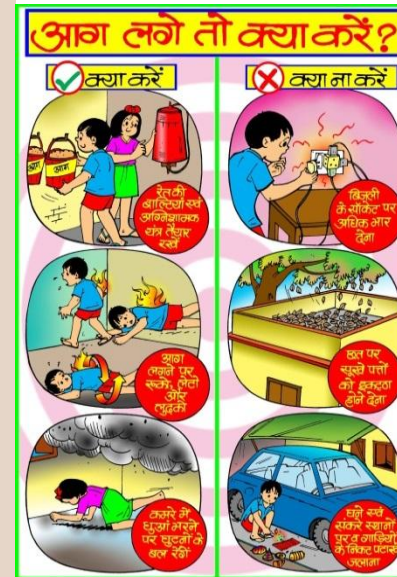
Training and Capacity Building…..

- Capacity Building of Responders: Fire Officials, Home Guards, Civil Defence and Community Volunteers to respond during disasters

- Fully functional SDRF: 50 teams sanctioned

- Safe Swim program: imparting swimming lessons to children and adolescents (6-18 age group) in vulnerable areas

- Training of divers in all vulnerable districts

- Developing action plans/guidelines on prevention/mitigation/response to heat waves, cold waves, fire incidents, boat capsizing, drowning, earthquakes, road accidents, urban flooding, air pollution etc.

- Developing DDMPs/Up dation of SDMPs/Hospital Safety plans

2. Public Awareness and Education:

Targeted and focused Awareness campaigns throughout the state through:

1. Organisation of hazard-specific safety weeks:
   I. Earthquake Safety week: 15 – 21 January
   II. Flood Safety week: 1 – 7 June
   III. Fire Safety Week:
   IV. Road Safety Week:
2. School Safety fortnight (1 – 15 July) and School Safety day (4th July)
3. Development and dissemination of IEC materials
4. Advisories through print & electronic media and hoardings
5. Rally, Public Events, Fairs, Festivals, Street plays etc.
6. Mass Messaging/ early warning to millions of stakeholders through SMS & WhatsApp

3. Programme for reaching Community and Children:

Conceptualization and implementation of programme:

1. ***Chief Minister School Safety Programme:*** being implemented in 80,000 plus government schools and 15, 000 private schools reaching to more than 30 million children.
2. **CB of local self- government representatives:** being implemented across all the 8,874 Gram Panchayats (< 44,000 villages) reaching to 88.7% population (91 million people) of Bihar; will lead to making resilient villages.
3. **Safe Swimming Programme:** programme initiated and planned to cover 28 flood prone district and will cover all the children.

4. Partnerships and leveraging on opportunities:

1. Partnerships is one of the guiding principles of DRR Roadmap, it says DRR Roadmap would be implemented in partnership with various development partners, CSOs, academic institutions, networks, UN Agencies etc.
2. Partnership has been successfully demonstrated in the development of "DRR Roadmap" of Bihar.
3. Development partners are providing technical assistance to Disaster Management Department (DMD) and BSDMA in the rolling-out of the DRR Roadmap.
4. BSDMA is working in partnerships in the development/ implementation of guidelines/ plans related to Drowning, Boat Safety, CB of Panchayat leaders, Chief Minister School Safety Programme and many more.
5. Technical assistance of development partners varies with their mandate and capacity of the organization.
6. BSDMA believes contribution of each and every partner is important in resilience building.

Lessons Learnt

1. **For implementation of Sendai agreement– SFDRR need to be contextualized to state specific context.**
2. **DRR Roadmap supports state & country in reporting progress against uniform indicators.**
3. **Roadmap helps align DM interventions with global framework and changing disaster and climate scenario.**
4. **Roadmap provides clear direction for DRR actions and agenda for 15 years.**
5. **Collective envisioning process together with different actors helps reaching a common goal.**
6. **Roadmap development process created an environment for DRR within the state.**

7. GoB reiterated and reinforced its commitment towards a resilient Bihar through allocation of adequate resources, capacities and enabling policy environment.
8. Commitment from national and international agencies.
9. The Roadmap development process provided opportunity to explore, forge and/ or strengthen partnerships and commitment towards implementing the Roadmap.
10. High ownership amongst key stakeholders of DRR Roadmap as well as clarity on what actions to undertake in next 15 years to reduce disaster risks in the state.
11. Helped in identifying the critical gaps in policy and institutional arrangements.

12. Constituting a drafting committee comprising representatives from govt., UN agencies, INGOs, local civil society and thematic experts was helpful in getting diverse perspectives and experiential insights towards the conceptualization and contents of the roadmap.

13. Proactively seeking inputs from a varied stakeholders ranging from disaster-affected communities of Bihar, frontline govt functionaries, PRIs and ULBs to senior government officials, UN Agencies, civil society and thematic experts was helpful in evolving a roadmap that draws upon the global developments on DRR and resilience agenda as well as is addresses the differential disaster risks and local realities of Bihar.

14. Ensuring participation of panellists from BCDRR at the validation workshop ensured continuity of ideas and the opportunity to build upon the preceding discussions.

Thank You