



# बिहार राज्य आपदा प्रबंधन प्राधिकरण

BIHAR STATE DISASTER MANAGEMENT AUTHORITY

## "EARTHQUAKE SAFETY WEEK" 2012

15 जनवरी 1934 के भूकम्प की विभीषिका

**A REPORT**



[www.bsdma.org](http://www.bsdma.org)

## Vision: To make Bihar a disaster resilient state

Bihar State Disaster Management Authority (BSDMA) believes that public awareness is the first step towards disaster risk reduction and this faith was reflected in the 5th meeting of the Authority (25th June 2011), chaired by hon'ble Chief Minister, Bihar cum Chairman of the Authority, where an important decision among others was taken to observe 'hazard specific safety week'. Accordingly, it was decided to observe:

1. Every year week starting from 15th January as "Earthquake Safety Week" in the state.
2. First week of June every year as "Flood Safety Week"
3. Foundation day (6th Nov) of the authority to be observed as "Disaster Volunteers Day"



## Hazards and Vulnerability of Bihar

Bihar is one of the most disaster prone states in the country and is prone to multi hazards. The geographical and topographical situation of the state makes it highly prone to severe and moderate earthquake risks. Flood has been prominent recurring hazard in the state. Fire, and cyclone are also responsible for damage of property and life loss. The earthquake hazard situation in Bihar is very peculiar, wherein the northern parts of the state abutting Nepal lie in highest seismic zones, but the southern districts lie in the comparative stable area with low intensity zone. As per seismic zoning map 6.5% of the total area of Bihar is placed in Zone V, referred to as very high damage risk zone. Out of the 38 districts of the state a total no. of 8 districts fall under the highest earthquake seismic zone-V. Again 22 districts of the state fall under seismic zone-IV and the rest in zone III. Capital city Patna is also in the highly susceptible to destruction as it lies in zone IV.

## Earthquake Disasters in Past

Awareness and sensitization among community in the campaign of Disaster risk reduction is imperative as earthquake itself is not responsible for the death and property destruction but old & weak structures and ignorance & carelessness of minimum building standards and unplanned construction.

The 1934 earthquake of scale 8.1 of origin in Nepal on the border of Bihar and Nepal was one of the worst quake in not only the history of Bihar but also India. Two districts Munger and Muzaffarpur were completely destroyed and caused widespread deaths (an estimated 10,000 people killed) and destruction of huge public & private property. Shocks were also felt in Mumbai and Kolkata where many buildings were damaged.

In 1988 the quake which hit Bihar on scale of around 7 on Richter damaged larger parts of Bihar and took toll of lives close to 375.

The recent Sikkim earthquake of Sep '2011 was 6.8 on scale also took toll of 9 lives in Bihar.



**EARTHQUAKE SAFETY WEEK TO BE  
OBSERVED IN THE WHOLE STATE  
FROM 15<sup>th</sup> JAN'2012**

**Press Release (highlights)**

**Patna, Bihar 11<sup>th</sup> Jan'2012**, Bihar State Disaster Management Authority, Govt. of Bihar has decided to observe '**Earthquake Safety Week-2012**' in the whole state, starting from 15<sup>th</sup> January, in remembrance of the most devastating Nepal-Bihar earthquake of 1934.

Keeping the seismic vulnerability of the state in mind and as a part of public awareness strategy, a wide range of activities has been planned at State and district level. These activities will be undertaken at school, college, thana and community levels.

At the state level two state level workshops have been planned. One in association with Department of Health, Government of Bihar, on '**Hospital Safety, Preparedness & Mass Casualty Management**' at Auditorium, State Institute of Health & Family Welfare (SIHFW), Seikhpura, Patna on 18<sup>th</sup> January'2012. The objective of this workshop is to create a common understanding of the situation to be planned for, in mass emergencies following Earthquake, train accident etc., to generate a common understanding of the generic preparedness planning concept and its components in a crisis situation and to suggest technologies that will improve the over-all effectiveness of the health system to handle mass casualties.

Another on '**Earthquake Disaster Mitigation in Bihar -The Road Ahead**' at Conference Hall, Hotel Patliputra Ashok, Patna, on 20<sup>th</sup> January'2012 with collaboration and support of Unicef. The main objective of this workshop will be to assess the status of mitigation in the state and to develop a broad road map for Earthquake Disaster Mitigation approach for the state in a consultative mode. The representatives from Nalanda Open University, IIT-Patna, NIT, BIT-Mesra/Patna, and the Govt. depts. engaged in construction activities and other engineering colleges of Bihar are also being invited for providing required thrust for the road map and also including it as a strategic approach for community mobilization. Students are especially encouraged to attend and participate in the event.

Along with the above workshops, 2nd Meeting of **Technical Committee on establishing State wide Seismological Observatory Network** was also called under the chairmanship of Prof. A.S. Arya, Hon'ble Member, BSDMA.

**At District level the District Disaster Management Authority's (DDMAs) have been instructed to organize and conduct various activities like 'DRR- Run', debates, Essay-Slogan writing competitions, Poster making, Disaster quiz, mock-drills and preparation of School Disaster management Plan among students at school/college level.**

**Public Awareness and education is the first step towards disaster mitigation and risk reduction.**

**For raising public awareness the safety measures would be widely publicized in Railway stations, Panchayat Bhavans, Airport, Libraries, Hospitals, Banks, Post-Offices, Civil Courts, Bus Stand, Shopping Complex, Hatt- Bazars, Cinema halls, Nagar Palikas, Nagar Nigam wards and other public places etc.**

At Thana level, the debates/talks will be organized with 'Bihar Rajya Nagrik Parishad' to raise the general awareness of the people and to seek public cooperation during times of disaster.

**BSDMA would like to appeal to the media in all forms and mediums to contribute and widely publicized the earthquake safety measures and help us in moving towards a safe and resilient Bihar.**



## State Level Activities During Earthquake Safety Week

### 1. Formation of the technical committee on setting up 'Seismology Observatories Network' in Bihar

A technical committee was formed in the chairmanship of Prof. A. S. Arya, Hon'ble Member, BSDMA for establishing 'Seismological Observatory Network' in Bihar on 13/11/2011. The second meeting of the technical committee was held on 17/01/2012 in the Office of BSDMA.



The committee consists of many scholars in this field. Mr. Animesh Chanda [Director, IMD, Bihar, Patna], Dr. A. K. Shukla [Dy. Director, EREC, IMD, Lodi Road, New Delhi], Director Incharge [G.S.I., Bihar, Patna], Dr. A. Kumar [Professor, Earthquake engineering, IIT Roorki], and Dr. A. K. Nath [Professor, Earth Sciences, IIT-kgp].



#### “घर सुरक्षित, आप सुरक्षित”

- घर या फ्लैट खरीदते समय, पूछिये कि
- वह जगह कौन से भूकंपीय जोन में है ?
  - क्या वहां 'Soil testing' किया गया है ?
  - क्या घर/फ्लैट भूकंप से सुरक्षित है ?
  - क्या Building/मकान BIS Codes के अनुसार बना है ?
  - क्या बनाते वक़्त वहां किसी Structural Engineer से सलाह ली गयी ?



### 2. State Level Workshop on 'Hospital Safety, Preparedness and Mass Casualty Management'.

In the Earthquake Safety Week from Jan 15-22, 2012, a state level workshop was organized on Jan 18 by the active collaboration Department of Health & family Welfare in association with BSDMA at State Institute of Health and Family Welfare (SIHFW), Seikhpura, Patna.

Apart from these, many health experts from around the state also took part in the workshop. This was a major achievement in the efforts put by BSDMA to take stock of situation of hospitals in the state in the occurrence of any earthquake and also co-ordination among various hospitals for mass casualty management. This also provided hospitals of all category to reflect on their capacity and efficiency to deal a mass casualty in any future disasters.

CMOs from different districts, Medical colleges, and various private hospitals took part in the workshop.

This initiatives do help in the time of emergency arising in the occurrence of earthquake.

**आपदा नहीं हो भारी यदि पूरी हो तैयारी ॥**



### Rationale:

*In view of the increasing emergency hazards, risks and vulnerabilities in the state, the community expectation from the health sector to meet the emergency health needs has been gradually increasing. Disaster experience in the last few years in the country and neighbouring regions have shown that they also simultaneously destroy health facilities, besides other infrastructures.*

### Objectives:

- *A common understanding of the situation to be planned for, in mass emergencies following Earthquake, train accident etc.*
- *A common understanding of the generic preparedness planning concept and its components in a crises situation.*
- *To suggest technologies that will improve the over-all effectiveness of the health system to handle mass casualties.*

*The workshop was chaired by Shri Anil.K Sinha Hon'ble Vice Chairman of the Authority & Dr. R. D Ranjan, Director, SIHFW. The workshop was concluded with a simulation table top exercise, where each hospital has to present its plan in a given situation. Dr. D.K Gupta, nodal officer, Disaster Management Health Department, Govt of Bihar actively supported the workshop and highlighted the role of health services during disasters.*

### 3. Meeting with Public Sector Companies

*In continuation to the events being held in the 'earthquake safety week' a meeting was organized with various private companies and PSUs on 17th January at BSDMA conference hall, 2nd floor, Pant Bhawan, Patna to explore the possibilities and arrangements for launching a state wide campaign towards earthquake awareness and safety under their CSR initiatives. Collaboration for creating the public awareness, sensitization and education on disasters was discussed with the companies and organizations present in the meeting. Their co-operation was sought as disaster is everyone's business to act and co-operate.*

*Public awareness and education by sensitizing people is the first step towards disaster mitigation and risk reduction. The role of Public sector companies and private sector companies or be joint venture on public-private partnership is very crucial in the endeavor in building momentum for public awareness in the entire state given the outreach of companies in the community. This outreach could be capitalized on for reaching masses for disaster awareness and sensitization which will be fruitful in mitigation efforts for hazards prevalent in the state.*

*Some of the PSUs and organisations participated in the meeting were IOCL, NTPC, HDFC & PNB.*



**Do You Know ?**  
**Patna is in earthquake zone IV**

**Want to know more???**  
Log on to : - [www.bsdma.org](http://www.bsdma.org)

**Facing Disaster Without Tears**

**Moving Towards a Resilient Bihar**



#### 4. Workshop on ‘Earthquake Disaster Mitigation in Bihar– The Road Ahead’ at Conference Hall, Hotel Patliputra Ashok, Patna



A state level workshop was held on Jan 20, 2012 in the ‘Earthquake Safety Week’ by the BSDMA with collaboration & support of Unicef in Hotel Patliputra Ashok, Patna on theme “Earthquake Disaster Mitigation in Bihar– The Road Ahead”. This was part of efforts being put by the BSDMA in moving towards a safe and resilient Bihar. This state level workshop was inaugurated by the Dr. Renu Kumari Kushwaha, Hon’ble Minister, Disaster Management, Govt of Bihar.

The impacts of the natural disaster have been very devastating and damaging, resulting in extensive loss to life and property. In addition, the disasters over the years have also adversely affected economic development in the State. In the recent past, due to various natural and human induced factors, the intensity and frequency of natural disasters has increased enormously. Giving serious thought to this day by day increasing threat from disasters, the Bihar State Disaster Management Authority (BSDMA) recognizes the need for a proactive, comprehensive, and sustained approach to their management with an objective to reduce the detrimental effect it has on the overall socio-economic development of the state. To tackle the issue more effectively and efficiently, the Authority has carried out extensive rounds of consultation meetings, in the field of policy planning and its implementation with the close intervention of different stakeholders.

BSDMA has been accorded the lead role in directing the strategic planning process for disaster response, risk mitigation, preparedness planning and risk reduction.

The main objective of this workshop was to assess the status of mitigation in the state and to develop a broad road map for Earthquake Disaster Mitigation approach for the state in a consultative mode. The representatives of Nalanda Open University, IIT-Patna, NIT, BIT-Mesra, representatives from all the deptt. engaged in construction activities and other engineering colleges of Bihar were also invited for providing required thrust for the road map and also including it as a strategic approach for community mobilization. Students were especially encouraged to attend and participate in the event.



## District Level Activities During Earthquake Safety Week

At the district level, all the districts of Bihar State were responsible for the district level activities on the week specified for the 'Earthquake Safety' by the BSDMA. In the districts, the respective District Disaster Management Authority (DDMA) were assigned the task for the district level activities. The DDMA's conducted the 'Earthquake Safety Week' within the state at two level; first at the school level and; second at the Panchayat and Thana level. various districts in the state organized and conducted various programmes through DDMA's at both school level and at Panchayat and Thana level. The school level activities included debates on disaster management and various prevalent hazards in the state. Essay-slogan writing, disaster awareness quiz's, poster making, mock drills and preparation and school disaster management plan. At the Panchayat and Thana level, debates and talks were conducted to raise public awareness along with 'Bihar Rajya Nagrik Parishad. From the year onwards the safety measures posters were published at railways stations, panchayats bhawans, hospitals, banks, post-offices, civil courts, bus stands, shopping complexes, hatt-bazar, cinema halls, municipalities etc. The 'Earthquake Safety Week' was observed in all the districts of Bihar and State has moved on the path of community sensitization and awareness to disasters. This is the very enthusiastic beginning for nurturing the culture of safety and preparedness in the state Bihar. This beginning was really remarkable as almost all sections of the society and community took part in the 'earthquake safety week' where not only administration but schools, colleges, institutes, organizations and common people participated in full zeal all across the state. Media support was also highly appreciable in bringing the public awareness. Districts Araria, Khagaria, Munger, Patna, Madhubani, Sitamarhi, Darbhanga and Begusarai are among those which actively participated in the 'earthquake safety week'.



### Media Room

विकास ऐसा हो जो आफत से बचाए ।  
ऐसा न हो कि आफत बन जाए ॥

