प्रेषक,

संख्या–313 /1–11–2015–राजस्व–11

आलोक रंजन,
मुख्य सचिव,
उत्तर प्रदेश।

सेवा में,

समस्त प्रमुख सचिव/ सचिव,
उ0प्र0 शासन।

राजस्व अनुभाग–11

लखनऊ : दिनॉक 02 जुलाई 2015

विषयः भूकम्प के दृष्टिकोण से भवनों तथा अन्य अधिसंरचनाओं आदि को भूकम्परोधी बनाये जाने के संबंध में।

महोदय,

उपर्युक्त विषय पर अवगत कराना है कि प्रदेश की भौगोलिक अवस्थिति तथा सामाजिक–आर्थिक चुनौतियॉ इसे प्राकृतिक आपदाओं के प्रति अत्यधिक संवेदनशील बनाता है। भूकम्प एक ऐसी प्राकृतिक आपदा है जिसके संबंध में अभी तक कोई पूर्वानुमान किया जाना सम्भव नही है। प्रदेश का एक बड़ा भू–भाग भूकम्प के प्रति अति–संवेदनशील श्रेणी में आता है। यह भू–भूभाग अत्यधिक सघन आबादी वाला क्षेत्र होने के कारण यहां भूकम्प आने की स्थिति में प्रदेश के लिये गम्भीर स्थिति उत्पन्न हो सकती है। भूकम्प के आने पर सर्वाधिक जन–धन हानि भवनों, इमारतो, मकानों आदि के गिरने/ढहने से होती है। ऐसे में भूकम्प से पीड़ित प्रदेश वासियों की सुरक्षा तथा परिसम्पतियों की संरक्षण के संबंध में आवश्यक कार्यवाही किया जाना अत्यंत प्रासंगिक हो जाता है।

2– इस संबंध में उल्लेख करना है कि प्रदेश के 31 जनपद सिस्मिक जोन–IV में आते है जो भूकम्प के दृष्टिकोण से High Risk Zone में हैं। जनपद बागपत, बिजनौर, गौतमबुद्धनगर, गाजियाबाद, अमरोहा, कुशीनगर, महराजगंज, मेरठ, मुजफ्फरनगर, रामपुर, सहारनपुर तथा सिद्धार्थनगर का सम्पूर्ण भू–भाग सिस्मिक जोन–IV में पड़ता है। इसी प्रकार जनपद अलीगढ़, बहराइच, बलिया, संतकबीरनगर, बलरामपुर, श्रावस्ती, बरेली, बस्ती, बदांयू, बुलंदशहर, देवरिया, गोण्डा, गोरखपुर, पीलीभीत, लखीमपुर खीरी, मथुरा, मुरादाबाद, शाहजहांपुर तथा सीतापुर के अधिकांश भू–भाग सिस्मिक जोन–IV के अन्तर्गत आते है।

3– पड़ोसी देश नेपाल में गत दिनों आये 7.9 रिक्टर स्केल के भूकम्प एवं प्रदेश के विभिन्न हिस्सों में महसूस किये गये इसके झटकों ने भवनों एवं अधि–संरचनाओं के भूकम्परोधी व मजबूत होने की आवश्यकता को अधिक प्रासंगिक बना दिया है। भूकम्प की उक्त घटना से प्रदेश में 19 व्यक्तियों की मृत्यु, 123 घायल व व्यापक स्तर पर संरचनाओं की क्षति हुई है।

4– इस संबंध में राष्ट्रीय आपदा प्रबंध प्राधिकरण भारत सरकार के पत्र दिनांक 09 जून, 2015 द्वारा भूकम्प से बचाव की पूर्व तैयारी हेतु विस्तृत दिशा–निर्देश दिये गये हैं। भारत सरकार के उक्त पत्र में जनगणना 2011 के आंकड़ों का उल्लेख करते हुये भवन एवं अधिसंरचनाओं के निर्माण में प्रशिक्षित लोगो यथा–सिविल, संरचनात्मक, भू–अभियंता, आर्कीटेक्ट तथा कुशल कारीगर की आवश्यकता पर विशेष जोर दिया गया है।

5– इस संबंध में राष्ट्रीय आपदा प्रबंध प्राधिकरण भारत सरकार के पत्र संख्या–6524/एसएस/जीआई/2015, दिनांक 09 जून, 2015 की छायाप्रति संलग्न कर प्रेषित करते हुये मुझे यह कहने का निदेश हुआ है कि कृपया उक्त पत्र में दिये गये निर्देशानुसार आवश्यक कार्यवाही सुनिश्चित करने का कष्ट करें।

संलग्नकः–यथोपरि

भवदीय,

(आलोक रंजन)
मुख्य सचिव

संख्या–3134(1) / तद्दिनांक

प्रतिलिपिः– निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1– सदस्य सचिव, राष्ट्रीय आपदा प्रबंध प्राधिकरण, भारत सरकार नई दिल्ली।
2– उ0प्र0 राज्य आपदा प्रबंध प्राधिकरण लखनऊ।
2– समस्त विभागाध्यक्ष, उ0प्र0।
3– उपाध्यक्ष, समस्त विकास प्राधिकरण/आवास विकास परिषद उ0प्र0।
4– समस्त नगर आयुक्त, उ0प्र0।
5– समस्त जिलाधिकारी, उ0प्र0।

आज्ञा से,

(लीना जौहरी)
सचिव एवं राहत आयुक्त

सदस्य सचिव
R. K. JAIN, IAS
Member Secretary

सत्यमेव जयते

गृह मंत्रालय
राष्ट्रीय आपदा प्रबंधन प्राधिकरण
Government of India
Ministry of Home Affairs
National Disaster Management Authority

(आलोक रंजन)
मुख्य सचिव
हरियाणा शासन।

No.6524.../MS/GI/2015

D.O. No. 5-06/2015-Mit

Dated, the 9th June, 2015

Dear Sh. Ranjan,

India's geo-climatic conditions and associated socio-economic challenges make the country among the most vulnerable to natural disasters in the world. Safety of people and protection of assets assumes critical significance in the wake of the Himalayan Tragedy that hit Nepal and some of our states on 25th April 2015 as well after shocks. Sustained investment in prevention, preparedness and mitigation measures is vital in today's time with respect to these hazards and disaster situations.

2. The Ministry of Home Affairs and National Disaster Management Authority have over a period of time, undertaken interventions on public awareness, capacity building, formulation of policies, guidelines and SOPs for guiding the states especially on earthquake preparedness and mitigation. The list of initiatives is enclosed in Annexure 1. On account of rapid urbanization, pressure of population on resources and pace of development in urban as well as rural areas, it would be imperative to review the status of the buildings in terms of their structural and non structural features and strength in terms of seismic resilience.

3. As per Census 2011 data, the total building stock stands at over 330 million in India. There is an urgent need to have appropriately trained civil, structural, soil engineers, architects and skilled masons for ensuring construction of structurally safe and seismically resilient buildings. The measures that may be initiated at the state level are enclosed as Annexure 2. The list at Annexure 2 is indicative and other measures based on local experience can be integrated and implemented.

Contd. p/2

एन.डी.एम.ए.-भवन, ए-1, सफदरजंग एन्क्लेव, नई दिल्ली-110029

4. I would request you to direct all concerned to initiate suitable action with respect to earthquake resilient construction and preparedness and update us periodically of the initiatives undertaken by the state in this regard. Please let us know in case of any assistance required from our side for the same.

With regards

Yours sincerely,

(R.K. Jain)

Encl. As above

Shri Alok Ranjan, IAS
Chief Secretary,
Government of Uttar Pradesh,
Lukhnow.

Initiatives undertaken for Earthquake Preparedness and Mitigation

1. National DM Guidelines on **Management of Earthquakes** formulated and released in **April 2007 and National Guidelines on Seismic Retrofitting of deficient building and structure released in June, 2014.**

2. NDMA in collaboration with the Delhi Government conducted a **Mega Mock Drill on Earthquake on 15 Feb 2012.** (Scenario: Magnitude- 7.9 (R) earthquake at a distance of 200 km from Delhi). It was conducted simultaneously at 400 places spread over all the nine districts of Delhi. Over 30 million SMS's were sent out along-with video-spots on TV and jingles on Radio.

3. **Delhi Emergency Management Exercise (DEMEx)** was conducted by NDMA in **December 2012** in association with DDMA which trained around more than 1000 Stakeholders in different domains of disaster management (earthquake centric – focused on health sector preparedness). The main activities included organizing 16 training tracks on various thematic dimensions of DM at various locations in Delhi from 29th November 2012 to 3rd December 2012 followed by Table top Exercise on 3rd December 2012 and field drill on 4th December 2012 at 32 locations in all the 11 Revenue Districts of Delhi. Guwahati Emergency Management Exercise (GEMEx) was executed on similar lines in Nov 2012.

4. The Mw - Mandi Earthquake Scenario – Multi State Exercise and Awareness Campaign 'conducted by NDMA (was a one year capacity building project) aimed at preparing the region to synergize their resources for better disaster preparedness to face a high magnitude earthquake. A major activity undertaken in the Project was the conduct of **Multi-State Mega Mock Exercise** in the tri-cities of Chandigarh Panchkula and Mohali and in Shimla on 13th February 2013 where in the response mechanism and their interdepartmental coordination of these states and Chandigarh UT were evaluated. The effort included creation of a pool of engineers and generating awareness amongst them on the use of RVS techniques and its application for vulnerability assessment of the built environment. It also included sensitization of different stakeholders on earthquake preparedness including Govt. officials and Community.

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5. **NE Shillong Earthquake Scenario – Multi- State Exercise and Awareness Campaign**, on the similar lines of Mandi Exercise, was undertaken for the 8 North East States in India (Capacity Building project for 1 year). **The Mega Mock drill at designated locations in each of the states took place in March 2014.**

6. The **"National School Safety Programme (NSSP)-A Demonstration Project"** is being implemented by National Disaster Management Authority (NDMA) in partnership with the State/UT Governments. The project is covering 200 schools in each of the selected 43 districts spread over 22 States/UTs of the country falling in **seismic zone IV & V (prone to earthquakes)** with the aim to sensitize children and the school community on disaster preparedness and safety measures. Under the project, development and circulation of Information Education Communication (IEC) material has been undertaken to make the school children, parents, teachers, school administrators and larger community aware of school safety and disaster risk reduction mechanisms, Mock Drills have been conducted (200 schools per district), Non structural measures in all 8600 schools including Rapid Visual Screening Demonstrative Structural Retrofitting in one model secondary school with strength of at least 1500 students in each district (22 schools covering project states /UTs) have been undertaken.

7. NDMA and Indira Gandhi National Open University (IGNOU) jointly executed a **Pilot Project on Capacity building in Disaster Management for Government Officials and Representatives of Panchayati Raj Institutions (PRI) and Urban Local Bodies (ULB) at District** level between February 2010 and June 2013. The project aimed to build and strengthen the capacity of the target groups (Government officials, PRI representatives and ULB representatives) in the areas of disaster prevention, preparedness, mitigation, response and recovery at the grass-root level. It was undertaken in selected 11 states, identified on the basis of their vulnerability to various natural and man-made hazards (multi hazard prone – includes earthquake prone states as well). In all, 16479 participants, against the targeted number of 16200 participants received trainings in the project.

8. NDMA undertook a study on **Development of Probabilistic Seismic Hazard Map of India** (PSHA) for creation of a national database of earthquakes for seismic hazard analysis which included development of national PSHA Map.

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Annexure - 2

Efforts that need to be strengthened with respect to Earthquake preparedness and mitigation

i. Safety Audits and Earthquake Resilience Assessment of the lifeline and critical buildings (hospitals, schools, important government buildings, telecom service buildings, power stations/grids, dams, etc). It should be aimed that the audits for such buildings should be completed within one year timeframe. Thereafter, corrective measures such as strengthening, retrofitting and reconstruction of these lifeline buildings must be taken up on priority.

ii. It would be important to ensure compliance of model building bye laws by ULBs and PRIs to avoid the vulnerable building stock being added in future. It is also desirable to conduct in-house site check or independent third party check to ensure implementation of building bye laws. It would be vital to focus on strengthening mechanisms for compliance of Building Codes for Multi-Storey buildings in risk prone areas

iii. Review all ongoing projects and ensure compliance of structural measures for disaster risk reduction by using latest NBC and BIS codes

iv. To strengthen the knowledge of disaster risk & mitigation especially with respect to earthquake preparedness in the educational curriculum of school, colleges and technical institutions, it would be important to meticulously examine and review the curriculum of technical education at diploma and degree levels, especially civil engineering, architecture and ITI streams (related with building construction and maintenance)

v. More sensitization, awareness and capacity building of stakeholders especially the community and children for earthquake preparedness and mitigation through messages, print and broadcast media, Radio, social media etc. (In particular - resident welfare societies, group cooperative housing societies -especially of multi-storied houses)

vi. To introduce system of incentives in loan disbursements for earthquake resilient construction as well as for insurance of property.

Contd. . . .p/2

vii. To introduce compulsory refresher training courses for Civil engineers and architects employed in Government, Semi - Govt. and Public sector undertakings for earthquake resilient construction and link the same with carcer progression requiremer t.

viii. Mock Drills to be regularly conducted especially in thickly populated urban Tier 1 and Tier II Cities

ix. Capacity Building (training) for Stakeholders involved in Construction and Building activities (masons)

x. Capacity building of frontline responders (mass casualty management in an earthquake scenario)

xi. Preparation of Database/Inventory of Trained Personnel in earthquake safety (structural engineers / architects / doctors / nurses / paramedics / teachers / community, etc).

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9. **Technical Document (Study) with respect to Geo-technical Investigation for Seismic Micro-zonation of Indian land Mass** has been submitted by IIS, Bangalore.

10. The work is in progress with respect to **preparation of catalogue of different building types** in various parts of India by IIT Mumbai.(study).

11. The work on **up-gradation of earthquake hazard maps** in various parts of the country is being undertaken by Building Material Technology Promotion Council (BMPTC)

12. For strengthening Techno-legal regime with respect to approval for construction activities, the urban local bodies (ULBs) and Town and Country Planning Acts in various State Governments and UTs, model building bye law was formulated by Expert Committee constituted by MHA and circulated by MHA in December 2006 (Do Letter No: 31-1/2004). Thereafter further reinforcements from Dr. A S Arya, National Seismic Advisor as well as Secretary, NDMA continued at regular intervals to all stakeholders for its implementation.

13. Mock exercises especially on earthquake preparedness and response are being conducted at various vulnerable locations of the country on an annual basis.

14. Up-dation and formulation of BIS Codes for Earthquake resilient design & construction as well as retrofitting has been undertaken.

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