

**GOVERNMENT OF INDIA
MINISTRY OF HOUSING AND URBAN AFFAIRS
LOK SABHA**

**UNSTARRED QUESTION NO. 6233
TO BE ANSWERED ON APRIL 02, 2026
REVISION IN NBC, 2016 FOR HIMALAYAN REGION**

NO. 6233. SHRI ANURAG SINGH THAKUR:

Will the Minister of HOUSING AND URBAN AFFAIRS be pleased to state:

- (a) whether the Government has formulated region-specific revisions to the National Building Code (NBC) 2016 and Model Building Bye-Laws to address slope instability and high seismic sensitivity (Zones IV and V) in Himalayan States, if so, the details thereof and if not, the details of the current norms;**
- (b) the details of the standards prescribed for promoting lightweight, indigenous, earthquake-resistant materials such as wood and bamboo over heavy reinforced concrete in these ecologically fragile zones;**
- (c) whether the Government has commissioned 'carrying capacity' studies for major Himalayan hill towns to regulate building density and mitigate land subsidence risks and if so, the findings thereof;**
- (d) the details of the Central financial assistance or technical support provided to States for retrofitting 'lifeline buildings' and critical infrastructure to ensure disaster resilience; and**
- (e) the steps taken to integrate these norms with climate change adaptation strategies for enhanced sustainability in the Himalayan region?**

ANSWER

**THE MINISTER OF STATE IN THE
MINISTRY OF HOUSING AND URBAN AFFAIRS
(SHRI TOKHAN SAHU)**

(a): The National Building Code of India (NBC) 2016 and the Model Building Bye-Laws (MBBL), 2016, issued by the Government of India, are advisory in nature and their implementation depends upon the state/local authorities as per their Act/Bye-laws/Regulations. However, the NBC provides seismic zones and associated parameters to address the vulnerabilities in various regions in India. A list of Indian Standards relating to landslide control in hilly areas and mitigation is enclosed at Annexure.

(b): Section 3A 'Timber' of Part 6 'Structural Design' of NBC 2016 covers the general principles involved in the design of structural timber in buildings, including elements of structures connected together by fasteners/fastening techniques. Further, Section 3B 'Bamboo' of the Part 6 covers the general principles involved in the design of structural bamboo in buildings with regard to mechanical resistance and durability of structures. Design of both bamboo and bamboo-based panels joined together with adhesives or mechanical fasteners are covered in this section. Further, the MBBL 2016 at clause nos. 6.4 and 10.2.6 have recommended use of local building construction and sustainability in the constructed buildings.

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(c) to (e): NDMA has undertaken a pilot project titled “Improving Earthquake Resiliency of Masonry Lifeline Structures and Upcoming Constructions” in the States of Tripura, Uttarakhand, and North Delhi Municipal Corporation (NDMC). Rs. 3.03 Cr have been allocated to each of these States. The project includes retrofitting of selected masonry lifeline buildings, construction of Technology Demonstration Units, and capacity building of engineers, masons, bar-benders, and carpenters. Subsequently, with savings from the project, the scope was extended to include retrofitting of critical and government buildings in Himachal Pradesh and Nagaland.

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF THE LOK SABHA QUESTION NO. 6233 FOR ANSWER ON 02.04.2026 REGARDING REVISION IN NBC, 2016 FOR HIMALAYAN REGION ASKED BY SHRI ANURAG SINGH THAKUR

LIST OF INDIAN STANDARDS FORMULATED UNDER THE HILL AREA DEVELOPMENT ENGINEERING, CED 46

SI No.	IS Number/ DOC Number	Title
1	IS 14458 (Part 1):1998	Retaining wall for hill area — Guidelines: Part 1 Selection of type of wall
2	IS 14458 (Part 2):1997	Retaining wall for hill area — Guidelines: Part 2 Design of retaining/breast walls
3	IS 14458 (Part 3):1998	Retaining wall for hill area — Guidelines: Part 3 Construction of dry stone walls
4	IS 14458 (Part 4):2018	Retaining wall for hill area — Guidelines: Part 4 Construction of banded dry stone masonry walls
5	IS 14458 (Part 5):2018	Retaining wall for hill area — Guidelines: Part 5 Construction of cement stone masonry walls
6	IS 14458 (Part 6):2020	Retaining wall for hill area — Guidelines: Part 6 Construction of gabion walls
7	IS 14458 (Part 7):2022	Retaining wall for hill area – Guidelines Part 7 Construction of peripheral reinforced gabion walls
8	IS 14458 (Part 8):2025	Retaining wall for hill area – Guidelines Part 8 Design of reinforced cement concrete (RCC) retaining walls
9	IS 14458 (Part 9):2025	Retaining wall for hill areas – Guidelines: Part 9 Construction of reinforced cement concrete (RCC) crib walls
10	IS 14496 (Part 1):2020	Preparation of landslide hazard zonation maps in mountainous terrains — Guidelines: Part 1 Meso-zonation
11	IS 14496 (Part 2):1998	Preparation of landslide hazard zonation maps in mountainous terrains — Guidelines: Part 2 Macro-zonation
12	IS 14680:2024	Landslide control measures — Guidelines (first revision)
13	IS 14804:2000	Siting design and selection of materials for residential buildings in hilly areas — Guidelines
14	IS 14961:2024	Surface water management in hilly areas (including rainwater harvesting) – Guidelines (first revision)
15	IS 17162:2020	Preparation of landslide risk assessment maps in mountainous terrains — Guidelines
16	IS 17163:2020	Site specific investigation and stability analysis of landslides — Guidelines
17	IS 18736:2024	Micropiles for slope stabilization for mitigation of landslides – Guidelines