

Date –22-March 2025

COUNTER-TERRORISM: STRENGTH, STRATEGY, AND SECURITY

WHY IN THE NEWS?

Home Minister Amit Shah reaffirmed the government's zero-tolerance policy towards terrorism and asserted that Naxalism in India will be eradicated by March 2026. Speaking in the Rajya Sabha during a debate on the functioning of the Home Ministry, he highlighted the Narendra Modi government's achievement in abrogating Article 370, fulfilling the vision of the Constitution's architects. He emphasised that Article 370 was the root of separatism in Jammu & Kashmir and that its removal ensured national unity under one constitution and one flag. Shah also criticised past governments for prolonging Article 370 due to vote-bank politics despite its temporary provision in the Constitution.

WHAT IS TERRORISM IN INDIA?

Terrorism in India refers to violent acts committed by individuals or groups to create fear, disrupt peace, and achieve political, religious, or ideological objectives. India has faced terrorism from various groups, including separatist movements, insurgent organizations, religious extremists, and foreign-sponsored terrorist networks.

Date	Incident	Location	Terror Group	Casualties	Remarks
March 12, 1993	Mumbai Blasts	Mumbai, Maharashtra	Dawood Ibrahim's D- Company	257 killed, 1,400+ injured	Series of 13 bomb blasts across the city.
December 13, 2001	Indian Parliament Attack	New Delhi	Jaish-e- Mohammed (JeM), Lashkar- e-Taiba (LeT)	9 security personnel, 1 civilian killed	5 terrorists were killed; the attack led to Indo-Pak tensions.
July 11,	Mumbai	Mumbai,	Indian	209 killed,	7 bomb blasts

In the context of India's Past Incidents of terrorism

Date	Incident	Location	Terror Group	Casualties	Remarks
2006	Train Blasts	Maharashtra	Mujahideen (IM), Lashkar-e- Taiba (LeT)	700+ injured	targeted Mumbai's local trains.
November 26-29, 2008	Mumbai Attacks (26/11)	Mumbai, Maharashtra	Lashkar-e-Taiba (LeT)	166 killed, 300+ injured	10 terrorists attacked key locations; Ajmal Kasab was captured.
January 2, 2016	Pathankot Attack	Pathankot, Punjab	Jaish-e- Mohammed (JeM)	7 security personnel killed	Attack on Indian Air Force base.
February 14, 2019	Pulwama Attack	Pulwama, Jammu & Kashmir	Jaish-e- Mohammed (JeM)	40 CRPF personnel killed	A suicide bombing on a CRPF convoy led to a Balakot airstrike.

COUNTER-TERRORISM MEASURES BY GOV OF INDIA.

1. Unlawful Activities (Prevention) Act (UAPA): Originally enacted in 1967 and amended multiple times (2008, 2019), this law strengthens India's legal framework against terrorism. It allows the government to ban terrorist organizations and designate individuals as terrorists.

2. National Investigation Agency (NIA): Established in 2008 after the Mumbai 26/11 attacks, the NIA is India's central agency for investigating and prosecuting terror-related cases across the country.

3. Multi-Agency Centre (MAC): A platform for intelligence-sharing among security agencies, operational since 2001, helping real-time coordination to prevent terrorist activities.

4. National Security Guard (NSG): Formed in 1984, the NSG is an elite counter-terrorism force that handles major terrorist incidents, such as the 26/11 Mumbai attacks.

5. Operation All-Out: Launched in 2017, this military operation targets terrorists and insurgents in Jammu & Kashmir, with joint efforts from the Indian Army, CRPF, and J&K Police.

6. Counter-Terrorism Grid (CT Grid): A national database integrating intelligence and law enforcement data to track and prevent terror-related activities.

7. Border Security Measures: India has strengthened its borders with fencing, advanced surveillance systems, drones, and increased patrolling, particularly along the India-Pakistan and India-Bangladesh borders.

8. Demonetization (2016): One of its objectives was to curb terror financing by eliminating fake currency, which was used to fund terrorist activities.

9. Cybersecurity & Anti-Radicalization Efforts: The government actively monitors social media and online platforms to prevent radicalization and recruitment by terrorist organizations.

CHALLENGES IN COUNTERING TERRORISM IN INDIA

1. Cross-Border Terrorism: Terrorist groups infiltrate India from neighbouring countries, especially Pakistan, making security efforts challenging.

2. Radicalization & Online Extremism: Extremist ideologies spread through social media and encrypted apps, making detection and prevention difficult.

3. Intelligence & Coordination Gaps: Inefficiencies in intelligence-sharing between central and state agencies can delay timely countermeasures.

4. Terror Financing: Hawala networks, fake currency, and international funding continue to support terrorist activities despite strict financial monitoring.

5. Porous Borders: Long, difficult-to-monitor borders with Pakistan, Bangladesh, and Nepal enable the movement of terrorists and illegal arms.

6. Judicial & Legal Challenges: Slow trials, difficulty in securing convictions, and human rights concerns complicate counter-terrorism efforts.

7. Urban & Lone-Wolf Attacks: Self-radicalized individuals and urban terrorism pose unpredictable threats, making prevention more difficult.

WAY FORWARD

1. Strengthening Intelligence Networks: Enhancing real-time coordination between intelligence agencies and security forces to prevent terrorist activities.

2. Modernizing Law Enforcement: Equipping security agencies with advanced technology, AI-based surveillance, and forensic capabilities for efficient counter-terrorism operations.

3. International Cooperation: Strengthening diplomatic ties and security partnerships with other countries for intelligence sharing and counter-terrorism efforts.

4. Counter-Radicalization Programs: Implementing education and awareness campaigns to prevent youth from being influenced by extremist ideologies.

5. Securing Borders: Further improving border fencing, surveillance, and cross-border counter-terrorism operations to curb infiltration.

6. Tackling Terror Financing: Strengthening financial monitoring and strict implementation of anti-money laundering laws to disrupt terror funding networks.

7. Expediting Judicial Processes: Establishing fast-track courts for terrorism-related cases to ensure swift trials and strict punishments.

CONCLUSION

India has made significant progress in counter-terrorism efforts through legislative measures, intelligence reforms, and military operations. However, emerging threats like cyber terrorism and lone-wolf attacks require adaptive strategies. A multi-pronged approach, including legal, military, intelligence, and diplomatic efforts, will be crucial in ensuring long-term national security.

PRELIMS QUESTIONS

Q. With reference to the National Investigation Agency (NIA), which of the following statements is/are correct?

1. The NIA was established in 2008 after the Mumbai 26/11 attacks to investigate and prosecute terrorrelated cases.

2. The NIA has the authority to investigate cases only within Indian territory and does not have jurisdiction outside India.

Select the correct answer using the code given below:

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2 Answer: A

MAINS QUESTIONS

Q. Discuss the major challenges faced by India in countering terrorism and suggest effective measures to address them. (250 words, 15 marks)

MAKING INDIA MORE DISASTER-RESILIENT

WHY IN THE NEWS?

India has experienced several earthquake tremors this past year, highlighting the need for better disaster preparedness. Earthquakes occur when stress builds up in the Earth's crust. The crust is made of large plates that slowly move and these movements cause earthquakes. When an earthquake hits a populated area, it can cause significant damage. **Approximately 59% of India is vulnerable to earthquakes**, and the Bureau of Indian Standards (BIS) has classified the country into four seismic zones based on earthquake risk. Zone V is the most active, including regions like the Himalayas, while Zone II is the least affected. Over the years, India has experienced several devastating earthquakes.



WHAT IS AN EARTHQUAKE?

An earthquake is a sudden shaking of the ground caused by the movement of tectonic plates beneath the Earth's surface. This seismic activity occurs due to the release of energy stored in the Earth's crust. The energy is generated by the movement along faults, which are fractures in the Earth's crust where two blocks of land have moved past each other. Earthquakes vary in intensity and magnitude and are measured using the Richter scale or the more modern Moment Magnitude Scale (Mw). The epicenter is the point on the

Earth's surface directly above where the quake originates, while the focus is the point within the Earth where the seismic energy is released.

EARTHQUAKE STATISTICS

India is one of the most seismically active countries in the world due to its geographical location on the Indian tectonic plate. Earthquakes are frequent, ranging from low to high intensity, and have been a cause of considerable destruction in the past. According to the National Center for Seismology (NCS), several key statistics highlight the seismic nature of India:

1. Seismic Zones: India is divided into four seismic zones – Zone II, III, IV, and V – based on the intensity and frequency of earthquakes. Zone V is the most seismically active region and includes areas like northeastern India, parts of the Himalayas, and Gujarat, while Zone II represents regions with relatively low seismic activity.

2. Vulnerability of Landmass: Approximately **59% of India's total land area** is prone to moderate to severe seismic activity, placing millions of people at risk.

3. Urban Vulnerability: Urban centers in India, particularly those experiencing rapid, unplanned urbanization, are highly vulnerable due to a lack of earthquake-resistant infrastructure and adherence to building codes. Cities like Delhi, Guwahati, and Srinagar face high seismic risks due to their location in or near high-risk zones.

These statistics emphasize the urgent need for preparedness, strict enforcement of seismic building codes, retrofitting of older structures, and community-level awareness to mitigate the risks associated with earthquakes.

MAJOR EARTHQUAKES IN INDIA

India has experienced several devastating earthquakes over the years, which have caused significant loss of life, damage to infrastructure, and displacement. seismic activity has continued to be a major concern. These disasters emphasize the urgent need for stronger earthquake resilience and preparedness, particularly in high-risk zones. Below are some of the most notable earthquakes:

1. Bihar-Nepal Earthquake (1934): Magnitude 8.0 – One of the deadliest earthquakes, it caused extensive damage in northern Bihar and parts of Nepal, killing over 10,000 people. Entire towns and villages were reduced to rubble, and thousands were left homeless. It highlighted the seismic vulnerability of the Himalayan region.

2. Latur Earthquake (1993): Magnitude 6.4 – This earthquake struck Maharashtra's Latur and Osmanabad districts, resulting in over 9,000 deaths and widespread destruction. The damage was exacerbated by poorly constructed houses and buildings. The event raised awareness about the need for earthquake-resistant infrastructure in rural India.

3. Bhuj Earthquake (2001): Magnitude 7.7 – One of the most devastating quakes in recent history, it claimed over 20,000 lives, left more than 150,000 people injured, and destroyed homes, schools, hospitals, and roads in Gujarat. The Bhuj earthquake brought to light the seismic vulnerability of western India and led to significant policy changes in disaster management.

4. Kashmir Earthquake (2005): Magnitude 7.6 – This earthquake affected northern India and Pakistanadministered Kashmir, causing widespread destruction and claiming over 80,000 lives. The aftermath saw international relief efforts, but the challenging mountainous terrain made rescue and rehabilitation difficult.

5. Sikkim Earthquake (2011): Magnitude 6.9 – This earthquake impacted northeastern India, causing landslides, damage to buildings, and disruption to infrastructure. The region's rugged terrain further complicated rescue operations. Several bridges and roads were damaged, isolating remote villages.

INDIA'S EARTHQUAKE VULNERABILITY

India's vulnerability to earthquakes stems from its location at the junction of several tectonic plates. The Indian plate is continuously colliding with the Eurasian plate, leading to seismic activities. The country is divided into four seismic zones based on earthquake risk:

1. Zone V: Includes areas with the highest seismic risk, such as northeastern states, parts of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, and the Rann of Kutch in Gujarat.

2. Zone IV: Covers areas like Delhi, parts of Haryana, Punjab, western Uttar Pradesh, and parts of Bihar.

3. Zone III: Includes regions with moderate risk, such as the rest of Uttar Pradesh, Maharashtra, Odisha, and parts of southern India.

4. Zone II: Includes areas with the least seismic risk, mainly in central and southern India.



CAUSING FACTORS FOR EARTHQUAKE VULNERABILITY:

1. Tectonic Plate Movements: The collision between the Indian and Eurasian plates creates immense pressure, leading to frequent seismic activity.

2. Fault Lines: India's geography includes several active fault lines, such as the Himalayan Thrust Fault, the Kutch Fault, and the Narmada Fault.

3. Unplanned Urbanization: Rapid urban growth without adherence to building codes increases vulnerability.

4. Soft Soil Conditions: In certain areas, soft soil can amplify seismic waves, increasing the intensity of earthquakes.

GOVERNMENT MEASURES FOR EARTHQUAKE SAFETY:

The Indian government has taken comprehensive measures to enhance earthquake preparedness and mitigate seismic risks. These efforts aim to reduce damage, save lives, and improve public safety. Key actions include updating seismic building codes to ensure earthquake-resistant construction and retrofitting vulnerable structures like hospitals, bridges, and older buildings. Advanced early warning systems, especially in high-risk zones, offer critical seconds to evacuate or shut down essential services, minimizing casualties. Public awareness campaigns educate citizens on safety protocols, such as "Drop, Cover, and Hold."

1. Seismic Zoning and Building Codes: The Bureau of Indian Standards (BIS) has developed **Indian Seismic Codes** to ensure that buildings and infrastructure are designed to withstand seismic forces. IS 1893, IS 4326, and IS 13920 are some key codes related to earthquake-resistant construction.

2.National Disaster Management Authority (NDMA): The NDMA has developed guidelines for earthquake preparedness and response. It conducts regular mock drills, awareness campaigns, and training programs.

3. Earthquake Early Warning Systems (EEWS): These advanced systems aim to provide timely alerts before seismic waves hit, helping minimize the impact of earthquakes. EEWS uses seismic sensors placed near fault lines to detect the initial low-intensity tremors (P-waves) and issue alerts before the more damaging S-waves arrive. This warning can give precious seconds or minutes to evacuate buildings, stop trains, or shut down machinery, thereby reducing casualties and infrastructure damage.

4. Urban Planning and Retrofitting: Effective urban planning plays a crucial role in reducing earthquake risks by avoiding construction in high-risk seismic zones and regulating land use. This includes promoting sustainable development practices that minimize exposure to seismic hazards. Additionally, retrofitting older buildings with earthquake-resistant technology, such as base isolators and reinforced concrete, can significantly improve their ability to withstand seismic forces. Encouraging public participation in planning and awareness programs further enhances resilience at the community level, fostering a shared responsibility for earthquake safety.

5. Public Awareness and Education: Public awareness plays a crucial role in disaster preparedness, as it empowers communities with the knowledge and skills to protect themselves during earthquakes. Educational programs focused on teaching earthquake safety measures, such as the "Drop, Cover, and Hold" technique, evacuation drills, and emergency preparedness, are vital. Increased awareness helps people respond calmly and effectively during seismic events, potentially reducing casualties and property damage. Government campaigns, NGOs, and community-based organizations must collaborate to ensure the wide dissemination of safety protocols, especially in high-risk areas, to foster a culture of resilience and preparedness across all sections of society

LIMITATIONS ON EARTHQUAKE PREVENTABILITY

Despite extensive efforts to improve earthquake preparedness, certain inherent limitations make it challenging to completely prevent the impact of seismic events. Understanding these limitations is essential to developing more effective mitigation strategies:

1. Unpredictability of Earthquakes: One of the most significant challenges is the inability to predict the exact timing, location, and magnitude of an earthquake. While seismic monitoring can identify regions prone to earthquakes, providing real-time forecasts remains a complex task beyond current scientific capabilities.

2. Gaps in Building Code Implementation: Although seismic building codes have been established in India, their enforcement remains inconsistent, particularly in rural areas and rapidly expanding urban centers. Many structures continue to be built without adhering to safety standards, making them vulnerable to seismic shocks.

3. Resource and Financial Constraints: Retrofitting older buildings, upgrading critical infrastructure, and implementing early warning systems require substantial financial investments, which can be a constraint for resource-limited regions. Additionally, technical expertise and skilled labor may not always be readily available.

4. Challenges of Rapid Urbanization: India's rapid urbanization has led to unplanned construction, increasing the population's exposure to seismic hazards. High population density, particularly in cities located in seismic zones, complicates evacuation and rescue operations during earthquakes.

5. Geographical Vulnerability: India's tectonic positioning, with active fault lines such as the Himalayan thrust zones and regions near the Indo-Eurasian plate boundary, makes the country inherently susceptible to seismic activity. This geographical reality limits the extent to which seismic risks can be entirely mitigated through human interventions.

PROACTIVE ACTIONS TO REDUCE EARTHQUAKE IMPACTS

1. Strengthening Seismic Building Codes and Compliance

a). Reinforcing Existing Structures: Focus on retrofitting schools, hospitals, and public buildings in seismic zones to meet updated earthquake-resistant standards

b). Enforcing Strict Building Regulations: Regular monitoring and inspections should be conducted to ensure compliance with seismic building codes, especially in urban areas.

2. Promoting Land-Use Planning and Risk Mapping

a). Zoning Regulations: Develop land-use plans that avoid construction in high-risk areas, such as fault lines and soft soil regions.

b). Seismic Hazard Maps: Utilize updated seismic hazard maps to identify and prioritize vulnerable areas for focused interventions.

3. Developing Advanced Early Warning Systems

a). Real-Time Monitoring: Invest in advanced seismic monitoring stations and sensor networks to detect early tremors and provide timely warnings.

b). Public Alert Systems: Establish mass alert systems (SMS, sirens, radio alerts) to warn communities in realtime and facilitate evacuation.

4. Building Community Awareness and Preparedness

a). Public Awareness Campaigns: Conduct earthquake safety drills in schools, offices, and residential neighborhoods to educate people on evacuation protocols.

b). Training First Responders: Train local volunteers, civil defense personnel, and emergency workers in search-and-rescue operations and first aid.

5. Enhancing Disaster Response and Recovery Capacity

a). Strengthening NDRF and SDRF: Equip National and State Disaster Response Forces with specialized tools, modern equipment, and rapid deployment capabilities for earthquake emergencies.

b). Emergency Shelters and Relief Centers: Establish well-equipped shelters in high-risk areas to provide immediate relief and temporary housing to affected populations.

6. Promoting Research and Development (R&D):

a). Seismic Research: Encourage research on earthquake-resistant materials, innovative construction techniques, and advanced seismic sensors.

b). Global Collaboration: Foster partnerships with international research institutions to learn from best practices in earthquake resilience and preparedness.

PREVENTION STRATEGIES

While earthquakes cannot be prevented, their impact can be minimized through prevention strategies such as:

1. Earthquake-Resistant Design: Encourage the construction of earthquake-resistant buildings using flexible materials that can absorb seismic energy.

2. Hazard Mapping: Conduct detailed seismic hazard mapping to identify high-risk areas and guide land use planning.

3. Public Awareness Campaigns: Educate people on earthquake safety measures, including evacuation routes, emergency kits, and safe behavior during quakes.

4. Strengthening Emergency Services: Enhance the capacity of emergency services, such as fire brigades, paramedics, and search-and-rescue teams, to respond quickly and effectively after an earthquake.

CONCLUSION

Building a disaster-resilient India requires a multi-pronged approach involving strict enforcement of building codes, retrofitting vulnerable infrastructure, developing early warning systems, and enhancing community awareness and preparedness. While earthquakes cannot be prevented, proactive measures can significantly reduce their impact, saving lives and minimizing economic losses. By fostering a culture of disaster preparedness and resilience, India can better withstand the challenges posed by future earthquakes and ensure the safety and well-being of its citizens.

PRELIMS QUESTIONS:

Q. With reference to India's seismic vulnerability, which of the following statements is/are correct? 1. India is divided into five seismic zones based on earthquake intensity and frequency.

2. Zone V is the most seismically active and includes parts of Gujarat, the northeastern states, and the Himalayan region.

3. Soft soil conditions in certain areas can amplify seismic waves, increasing earthquake damage.

Select the correct answer using the code given below:

(a) 1 and 2 only(b) 2 and 3 only(c) 1 and 3 only

(d) 1, 2, and

Answer: B

MAINS QUESTIONS:

Q. Examine the role of tectonic activity in shaping India's earthquake risk. How can seismic safety be improved?

(250 words, 15 marks)

