

After Narsingdi's jolt, a national push for seismic resilience is overdue



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The 5.7 earthquake in Narsingdi on November 21 renewed national awareness of the country's deep seismic vulnerability. Lasting for 26 seconds, it was one of the strongest shakes in the region in decades. The tremor sent thousands scrambling into the streets as buildings swayed violently. Within hours, deaths and injuries were confirmed, many caused by failing structural elements. Though moderate, the quake reminded us an uncomfortable truth: Bangladesh lies atop active tectonic time bombs capable of producing far larger events. For many young Bangladeshis, this was their first direct brush with a seismic hazard, prompting the government to acknowledge it as a serious wake-up call. History, science, and lived experience now converge on the same urgent message: the window for preparedness is rapidly closing.

Countries facing high seismic risk offer clear lessons for Bangladesh. Japan, the US, and Turkey have demonstrated that strictly enforced modern building codes save lives. After Turkey strengthened its codes in 1998, newer buildings performed dramatically better during the 2023 earthquakes. In California, mandatory retrofitting of unreinforced masonry and soft story buildings has significantly reduced casualties. The principle is straightforward: buildings must be designed to flex without collapsing, and regulations must be enforced—not simply drafted. Japan leads globally in proactive strengthening. Following the 1995 Kobe earthquake, sweeping legislation was introduced requiring and incentivising retrofitting. Today, more than 80 percent of homes meet seismic standards, and nationwide upgrades to schools, hospitals, and bridges helped limit casualties during the 2024 northern Japan quake. Retrofitting methods such as steel bracing, ground-floor

reinforcement, and fibre-wraps for columns are now both effective and affordable.

Advanced engineering solutions provide additional layers of safety. Base isolation and tuned mass dampers, installed in thousands of Japanese buildings, have allowed critical facilities to operate during major quakes and help absorb earthquake energy and stabilise structures. Even simple innovations—like automatic gas shut-off valves—reduce fire risks and are now mandatory in Tokyo. Preparedness also plays a vital role: Japan conducts nationwide drills annually and US cities train neighbourhood responders and run public awareness programmes. Early warning systems via phones and TVs, now standard in Japan, Mexico, and California, provide crucial seconds to take cover or stop trains and machinery. Bangladesh currently lacks such capabilities but can adopt these models. Global experience underscores a powerful truth: resilience costs far less than disaster recovery.

One of the major barriers to reducing Bangladesh's earthquake risk is the high cost of strengthening hundreds of thousands of vulnerable buildings. For a lower-middle-income country, large-scale retrofitting is a serious financial challenge—yet the alternative is far worse. A major earthquake in Dhaka alone could cause \$69 billion in damage, vastly exceeding the cost of prevention. Despite this, preparedness funding remains limited as government budgets are stretched and many homeowners cannot or choose not to invest in safety upgrades.

A multi-pronged financing approach is therefore essential. Public spending should first focus on critical infrastructure—hospitals, schools, fire stations, and utility networks—to ensure they function during emergencies.

International partners like the World Bank, ADB, and JICA can expand their support for initiatives such as the urban resilience programme. Global evidence shows that each dollar invested in resilience saves four in future losses. The private sector must also be incentivised through tools such as property-tax rebates, utility discounts, and a national earthquake resilience fund offering zero-interest loans would encourage retrofitting.

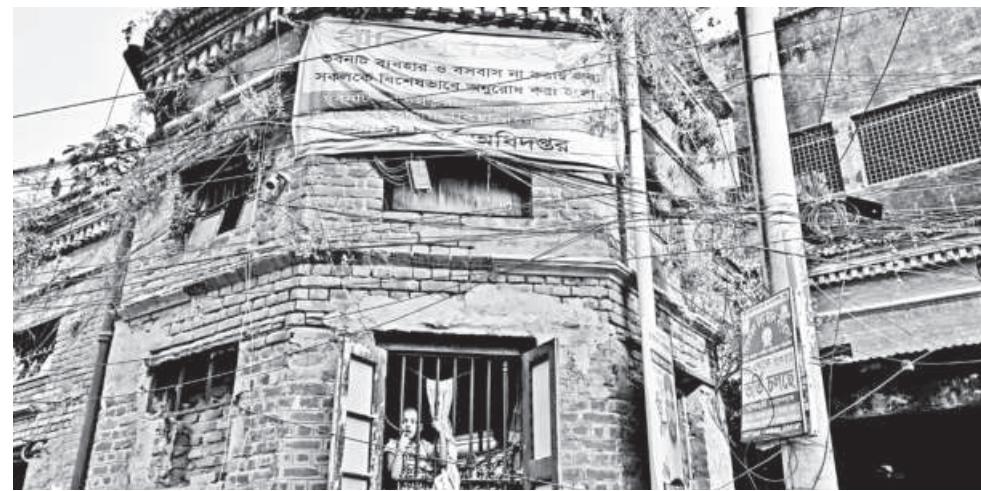
engagement, Bangladesh can fund a safer future.

However, immediate priorities must combine structural safety measures with rapid technology deployment. Engineering teams from Rajuk, Buet and the military should inspect cracked buildings—particularly in Old Dhaka—and evacuate high-risk structures. Citizens should be encouraged to report damage through mobile apps that feed into

fibre-reinforced polymers, engineered bamboo, and ground-floor strengthening—drawing on successful models from Turkey and India. Emergency services require modern equipment, regular drills, and digital tools for search-and-rescue coordination. School curricula, community volunteers, and a trained network of community masons can promote simple, low-cost safety upgrades in informal settlements. Policy reforms, structural fitness certificates, and retrofit-financing tools must also be fully operational.

Long term (over five years) reforms must reshape urban environments for resilience. All new buildings should follow seismic design standards, while older hazardous structures are retrofitted or phased out. Digital permitting systems, supported by AI-based compliance checks, must approve only code-compliant plans. Urban planning should incorporate seismic risk maps, create wider roads and open spaces, and prioritise resilient infrastructure. Long term success also depends on expanding seismic monitoring networks, supporting local engineering research, and pursuing regional cooperation. Integrating early warning systems and citywide digital risk maps will further enhance preparedness.

The Narsingdi earthquake—though moderate in magnitude—has decisively dispelled any remaining illusion that Bangladesh is safe from seismic threats. The question is no longer “if”, but “when”. To confront this reality, national institutions must urgently strengthen enforcement, preparedness, and response capacities by drawing on proven international strategies. At the same time, Bangladesh cannot overlook the critical roles of technology, community training, and smarter urban planning. Just as the nation transformed its cyclone preparedness over the past decades, it must now blend traditional safeguards with innovative, context-specific solutions for seismic resilience. With coordinated action today and sustained investment in engineering, technology, and governance, Bangladesh can break its cycle of vulnerability and move toward a safer and more resilient urban future.



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PHOTO: PALSH KHAN

Banks could provide soft loans, while expanded earthquake insurance—modelled on Turkey's DASK system—can be established.

For new development, access to finance must be directly tied to seismic safety. Banks should require certified structural designs before approving construction loans, and developers who exceed standards could receive faster approvals or additional floor area. Strict penalties, including demolition orders, should apply to code violations. Nationally, Bangladesh could explore catastrophe bonds or join a regional insurance pool to secure rapid post-disaster funding. A modest “resilience surcharge” on major urban projects could help finance retrofits in high-risk neighbourhoods. With coordinated public investment, donor support, private participation, and community

real-time assessment dashboards. Authorities must issue aftershock alerts and check gas and power lines to prevent secondary fires, while drones, remote sensing and AI can help map surface damage and unstable zones. A nationwide media campaign on earthquake safety, emergency kits, and safe behaviour during tremors will further strengthen public readiness.

Over the medium term (one to five years), institutional capacity must expand significantly. The Bangladesh National Building Code needs strict enforcement across all municipalities, supported by Building Safety Cells and a growing cadre of trained inspectors and structural engineers. At the same time, Bangladesh can pilot innovative retrofitting techniques—rubber bearings,

16 DAYS OF ACTIVISM AGAINST GENDER-BASED VIOLENCE

Rethinking Bangladesh's cyber security laws for women



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From November 25 to December 10 each year, the United Nations urges governments to go beyond slogans and tackle violence against women. This year, the UN's UNiTE campaign has shifted focus to a newer frontline: the internet.

Under the theme “UNiTE to End Digital Violence against All Women and Girls”, UN Women warns that technology has become a major vehicle for stalking, threats and humiliation aimed at women and girls, and that many still live without specific legal protection from such abuse. Bangladesh is not outside this picture.

The interim government has since revoked the CSA and introduced a Cyber Security Ordinance, while signalling plans to recognise internet access as a civil right and to review the most controversial clauses.

The change in tone is welcome. The wider lesson is that cyber laws, for years, have been justified in the name of safety while being enforced in ways that undermine freedom of expression.

For women and girls facing digital violence, this history of cyber laws in Bangladesh is of importance. A woman who has watched critics being wrongfully jailed for civic debate under cyber laws may not feel confident about getting justice under the same law being misused widely. When protection becomes a language for surveillance and censorship, trust in state institutions erodes.

The UNiTE campaign presents Bangladesh with an opportunity to chart a different course. It aims to address the growing issue of digital violence, including online abuse, harassment, and control, and the need to create safer and more inclusive online spaces.

The goal, according to the UN, is to urge governments, tech companies, and communities to take action to end digital violence and promote gender equality in digital spaces.

A rights-respecting digital future for women and girls will not emerge from just renaming laws. Technology-facilitated gender-based violence (TFGBV) needs to be clearly defined in law.

UN Women and other experts use the term TFGBV to cover cyberstalking, image-based abuse, non-consensual sharing of intimate

units and courts that regularly issue strict prison sentences.

These countries can act decisively because their definitions of offences are crystal clear.

Bangladesh's statutes should acknowledge and define violence and its provisions explicitly. Non-consensual sharing of intimate images has often been prosecuted under sections of the Cyber Security Act or the Pornography Control Act, even though neither explicitly names image-based abuse as a distinct crime. Deepfakes and AI-generated sexual content are not explicitly mentioned in any statute. Cases get forced through general clauses on defamation, obscene material or unauthorised data modification, none of which capture the actual

harm. These are just two examples.

Also, protection must mean more than prison sentences. Survivors need safe ways to seek help: clear reporting channels, easy-to-use complaint mechanisms, police and prosecutors trained in handling digital evidence and avoiding victim-blaming, and time-bound processes for taking down abusive content. Without investment in awareness, training and monitoring, progressive laws remain on paper.

Any future cyber law must be grounded in international human rights standards. That means narrowing offences, strong safeguards against arbitrary arrest and surveillance, and the decriminalisation of defamation and other non-violent speech.

Criminal penalties should be reserved for serious offences such as credible threats, extortion, child sexual abuse and persistent stalking.

As the 16 Days of Activism is underway, the question for Bangladesh is not whether digital violence exists. Women and girls, public figures and private citizens, have been living with its consequences for years.

The real question is what kind of virtual space this country chooses to build. A digital future envisioned by the UNiTE campaign would be one in which a teenager can report a faked image without fear, a woman can challenge harassment without risking arrest, and critics can say what is needed to without a law hanging over their head.

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content, AI-generated deepfakes and other forms of online harassment with real offline consequences.

The UK has criminalised the non-consensual sharing of intimate images since 2015, and courts have jailed offenders for revenge porn, sextortion and threats to share intimate photos. In 2023, the Online Safety Act expanded this to cover deepfakes, too. Australian courts have also sentenced offenders for filming women without consent, sharing intimate content and threatening to distribute nudes, handing down both prison terms and heavy fines. South Korea treats digital sex crimes as serious offences, with specialised cyber

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Sl. No.	Tender ID & Reference No.	Package No.	Description of Works	Last Selling Date & Time	Closing Date & Time	Opening Date & Time
01	1156320, 28.21.0000.18 1.49.002.25.01	28.21.0000.18 1.49.002.25	Coating Defect & Gas leak detection works of 35 km gas distribution pipelines of SGCL in Bholia.	07 December 2025 17:00	08 December 2025 12:00	08 December 2025 12:00

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