

Living on the edge: Hidden dangers in residential zones

Residential safety risks explained in plain prose



Contributed by
BRIG GEN DATUK GOH SENG TOH

When discussing high-risk residential zones, it is important to be clear about what this term truly encompasses. High-risk areas commonly include flood-prone neighbourhoods, hillsides vulnerable to landslides and regions built on limestone formations that are susceptible to sinkholes. They also extend to areas located near geological fault lines or unstable soil conditions, as well as residential developments situated next to gas pipelines, electrical substations, reservoirs, industrial facilities or chemical plants. In addition, homes built along forest fringes face heightened fire risks while those constructed beneath or close to high-voltage overhead or underground transmission lines carry their own set of safety concerns.

Despite these very real dangers, most buyers are not genuinely aware that they are purchasing property within such zones. Using hillside developments as an example, homeowners are never issued a certificate confirming that a slope is safe both in its design and its final construction. Instead, they are expected to rely on the fact that approvals were granted by professionals and authorities. To an untrained eye, a reinforced slope appears stable, that is, right up until the moment it fails.

Lessons we failed to learn

The tragedy of Highland Towers

should have marked a permanent shift in how residential safety is treated in Malaysia. Thirty years ago, forty-eight lives were lost due to a landslide caused by heavy rainfall, poor drainage and fundamental design failures. Yet, even decades later, there remains no genuine sense of closure or accountability. More troubling is the fact that Highland Towers was not an isolated incident.

Across the country, similar warnings have repeatedly emerged. In Ampang's Taman Bukit Permai, slope instability and landslides have placed residents in constant danger. In Shah Alam's Taman Sri Muda, recurring floods continue to devastate communities due to poor planning. In Subang Jaya, the houses around the Putra Heights vicinity suffered the gas leak and explosion causing massive damage to the surrounding houses. Cameron Highlands has suffered destructive mudflows driven by unchecked overdevelopment while rapid urbanisation over limestone formations in Puchong and Rawang has resulted in sinkholes. Each of these incidents tells the same story. Approvals were granted, early warnings were ignored and ordinary residents ultimately paid the price.

What must change to prevent future disasters?

More than a decade ago, during a national slope management seminar attended by senior officials, engineers and planners, a critical question was raised: Have we done enough to protect homeowners?

The honest answer remains no.

At that seminar, several key resolutions were agreed upon. These included simplifying and strengthening hill-site development guidelines, mandating the involvement of independent and accredited geotechnical checkers and enforcing stricter penalties against negligent developers and slope owners. There was also consensus on the need to establish comprehensive slope inventories, formally gazette them under existing laws and ensure that slope designs are reviewed beyond individual project boundaries rather than in isolation. Major earthworks and slope stabilisation were meant to be completed before construction began, followed by regular professional inspections of high-risk slopes. Maintenance manuals for engineered slopes, community monitoring groups working alongside local authorities and the creation of a centralised geotechnical body, modelled after Hong Kong's system, were also strongly recommended. Unfortunately, implementation of these measures has remained weak.

Shared responsibility for housing safety

Residential safety must be treated as a shared responsibility. Developers are obligated to carry out proper ground investigations and implement appropriate mitigation measures. Local councils, or PBTs, must have the courage to reject unsafe proposals outright rather than approving them with conditions that are

never enforced. Government agencies should disclose risk maps transparently so that buyers can make informed decisions. At the same time, residents and prospective homeowners must be empowered with accurate information and encouraged to walk away from developments that are visually appealing but structurally dangerous.

Future buyers need to recognise that some projects are nothing more than beautiful disasters waiting to happen.

The problem with impact assessments

One of the most serious gaps in the current system is the inaccessibility of Environmental Impact Assessments, Social Impact Assessments and Traffic Impact Assessments. These documents are typically submitted only to local authorities and are not made available to buyers, even though they directly affect both personal safety and long-term financial security.

Worse still, many of these assessments are commissioned by developers themselves, raising serious concerns about independence and bias. There have been cases where traffic impact studies concluded that congestion would not occur in areas already infamous for severe gridlock. Yet when disasters strike, authorities are quick to shift blame onto buyers, arguing that consumer demand fuels risky development. This argument is deeply unfair.

Buyers have a fundamental right to expect safe and sound construction, regardless of where a property is located.

Accountability remains the missing link

There have been partial successes in addressing these issues but they are inconsistent at best. Solutions such as mandatory risk disclosures, stricter enforcement, early warning systems, periodic inspections, insurance mechanisms and climate-resilient planning are well understood and widely discussed. However, persistent legal and regulatory failures continue to undermine real progress.

These failures include poor monitoring by local authorities, weak enforcement of slope and drainage master plans, inconsistent application of the Uniform Building By-Laws and planning laws as well as developments being approved without robust or truly independent impact assessments. Until accountability becomes real rather than theoretical, collaboration alone will never be enough.

Buyers remain exposed

Structured safety briefings or formal checklists during the handover process could significantly reduce buyer risk but such measures simply do not exist today. Buyers should reasonably expect clear answers to basic questions. Whether a home was approved in line with planning norms, whether it is located in a designated risk zone, what mitigation works were carried out and by whom, why insurers may be refusing coverage and what historical incidents have occurred in the area.

Without mandatory disclosure, buyers remain dangerously exposed. Purchasing the wrong house in the wrong location can leave homeowners financially vulnerable long before their mortgage is fully paid off.

Residential safety is not a luxury and should never be treated as optional. It is a non-negotiable right. Until transparency, enforcement and accountability become standard practice, many Malaysians will continue living on the edge, often without realising just how close they are to falling. 



Brig Gen Datuk Goh Seng Toh is the president of the National House Buyers Association (HBA)