Conduct regular inspections to minimise risk of tree failure in urban areas

SITI Nur Masyitah Razali sometimes takes public transport to work in Jalan Imbi from Setiawangsa.

The monorail station is located just 500m from her office but the presence of trees along the route is making the 42-year-old human resource executive anxious, given the reports of trees or branches falling around the capital city during bad weather.

On May 7, a man was killed and another person injured after an uprooted tree fell on their car at Jalan Sultan Ismail.

Heavy rain and strong winds since January have led to the Malaysian Fire and Rescue Department of Malaysia recording 1,085 incidents of fallen trees nationwide in the first four months of this year.

In 2021, the Malaysian Civil Defence Force recorded 3,081 such cases and the following year 3,358 cases. In 2023, a total of 4,825 cases of falling trees or branches were recorded, resulting in 10 fatalities and injuries to 47 people.

"The trees along the roads look beautiful and help to keep the city cooler. But if not properly managed, the safety of the public, infrastructure and surrounding buildings will be at risk, especially with the unpredictable weather these days due to climate change.

"Rapid development has also led to many trees that shouldn't be cut down being felled, while some that should be removed are left intact without proper monitoring," Siti Nur Masyitah told *Bernama*.

Minimise Tree Failure

On June 27, Minister in the Prime Minister's Department (Federal Territories) Dr Zaliha Mustafa said Kuala Lumpur City Hall has felled 173 high-risk trees since 2019. However, experts caution that this does not guarantee incidents of fallen trees will not occur in the future, given the rapid development taking place nationwide driven by the steadily increasing population each year.

Malaysia Society of Arborist president Mohd Zailani Jamil said it is necessary to conduct regular inspections and implement mitigation measures to minimise the risk of tree failure in cities. (Tree failure refers to a structural deterioration or breakage of any part of a tree, including the roots, trunk or canopy branches.)

"It is imperative that the authorities and relevant stakeholders prioritise the implementation of comprehensive inspection and maintenance programmes to ensure the safety of trees in urban areas," he told *Bernama*.

He also said the recent incidents of fallen trees serve as a reminder to consider the importance of tree roots when developing the surrounding areas.

"Tree roots are the primary contributors to tree stability and any disturbance to the roots or cutting them off can lead to decay, compromising the structural integrity of the tree.

"Therefore, urban development plans must integrate measures to protect and preserve tree roots to maintain the stability of trees in the long term," he said.

Visual Tree Assessment Method

Forest Research Institute Malaysia (FRIM) Forestry and Environment Division arborist Abdul Hayat Mat Saad, meanwhile, opined that the public must have some basic knowledge about the health of



Climate change, heavy rainfall and building construction works have heightened the risk of damage and injury posed by old trees

in urban areas, so that they can inform the local authorities should they come across unhealthy trees, thus ensuring public safety.

He said the public can use the visual tree assessment method to assess the health of trees.

"The first stage involves observing the physical condition of trees from a distance to identify those at risk of falling or are unhealthy.

"The second stage involves walking around the tree 360 degrees to closely observe the condition of the soil surrounding the tree and its trunk, leaves and roots. If mushrooms are growing around the base of the trunk or there are large 'wounds' on the trunk, it indicates internal decay.

"At this point, we move to the third stage, that is, 'advanced assessment', which can only be conducted by certified arborists using specific tools," he said.

Not all unhealthy-looking

pointing out that some only require their branches to be trimmed while the wounds on certain trees can be left to heal on their own.

"Trees, much like humans, can show signs of 'illness' if they are stressed by their surroundings. These signs need to be treated to prevent a tree from falling," he said.

Abdul Hayat also advised the public never to nail banners or advertisement boards on trees.

"If the nails are not properly removed and are left behind after the banners or advertisements are taken down, it will accelerate the tree's decay, deteriorating its health and increasing the risk of it falling," he said.

Poor Urban Planning

Meanwhile, according to biodiversity consultant Surin Suksuwan, the recent incidents involving tree failure in Kuala Lumpur were largely due to development pressure, exacerbated by climate change which has affected mature, old and large trees.

"I think the problem lies in urban planning and expansion because we are very car-dependent, which leads to continuous expansion of roads.

"When roads are expanded, the roots of old trees often get damaged or are chopped off, which may cause the trees to become less stable. When this happens, roads and sidewalks will not be as stable as before, which pose a danger to pedestrians," he said.

Climate change and the resulting heavier-than-usual rainfall, as well as infrastructure development and building construction works, have heightened the risk of damage and injury posed by old trees.

Surin also said it is important to have good arborists in every local council to ensure urban trees are well-maintained.

"Planting the right trees in the right places is crucial. It is important to implement proper tree trimming methods to prevent small branches from falling and damaging public property during bad weather," he added.

Recently, Housing and Local Government Minister Nga Kor Ming was quoted by the media as saying that Malaysia has a shortage of certified arborists or "tree doctors".

Mohd Zailani, who is also a certified arborist, said Malaysia currently has about 150 arborists certified by the International Society of Arboriculture, compared to around 400 in Singapore.

He said in several developed countries, only certified arborists are allowed to handle public trees to ensure proper mitigation measures are taken to prevent tree failure.

— Bernama