'KL CAN'T HANDLE MORE THAN 70MM'

Weather stations recorded 150mm-200mm of rainfall on Thursday, says hydrologist

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HURSDAY'S flood was a testimony to the fact that Kuala Lumpur is not equipped to handle more than 70mm of rainfall in a widespread area, including along river banks and beyond.

Hydrologist Dr Zulkifli Yusop said the stations around the city that he surveyed had an average of between 150mm and 200mm of rainfall during the five-hour storm.

"KL can handle 10 per cent of that without flooding, but anything above 50mm to 70mm would cause flooding.

"Even forests and plantations would have been flooded with Thursday's average of 150mm to 200mm, what more urban areas," he said, adding the higher readings were captured from rain stations located in the upstream areas of Sungai Gombak.

He said that even with all sys-



Masjid Jamek in Kuala Lumpur had the appearance of an island during the downpour on Thursday. Hydrologist Dr Zulkifli Yusop (inset) said KL's drainage system was overwhelmed by the excessive rainfall. PIC BY HAZREEN MOHAMAD

tems in place, such as vegetation and retention ponds, it could only support about 20mm or 10 per cent of the entire rainfall.

The Universiti Teknologi Malaysia professor said that though the peak of rainfall in the middle of Kuala Lumpur was captured at 44.5mm at 4pm, the reading was only reflective of stations in the middle of the city, instead of rainfall for all the five hours across multiple stations around the Klang and Gombak rivers.

"The reason why it flooded on

such a scale was because it was raining across a wide area around and throughout the rivers' expanse.

"This is also typical of the big floods in KL in the past.

"When water rushes from upstream to downstream and it's also raining in the lower reaches, there will be river overflow, backflow and stagnation as water is already accumulating downstream."

Zulkifli said rainfall was a bigger factor than choked drainage, but he did not discount such factors as well as that of overdevelopment in urban settings.

He confirmed the Department of Irrigation and Drainage's argument that floods on a larger scale had been prevented due to the Smart Tunnel, which had diverted the water in time.

Zulkifli also said that there should be a holistic and integrated set of flood mitigation and prevention plans for Kuala Lumpur, as it was an urban area with challenges in terms of land and space.

"Another project like the Smart Tunnel for the Gombak river could help, but that would be pricey," he said, drawing on the RM2 billion facility.

"There should also be underground or above-ground reservoirs and measures put in place to safeguard rivers and their catchment.

"The authorities must also implement sustainable construction and development practices to prevent dumping of waste or silt and erosion."

He said there should be greater cohesion between authorities in charge of rivers.