## Water as woe

Mumbai cannot manage its flooding without a new deal for drainage and housing

The revival of the monsoon has overwhelmed Mumbai and its suburbs once again, paralysing life, disrupting drinking water supplies, and exposing the parlous state of its infrastructure. It is clear that the volume and duration of monsoonal rain are turning unpredictable, and intermittent torrents, with crippling impacts on cities will become more frequent, influenced by a warming climate. Strengthening that theory, three weather stations in Mumbai recorded a staggering level of rainfall in one week from July 13, ranging from 628 mm in Mahalaxmi to 958.5 mm in Santa Cruz, the latter experiencing a peak of 234.9 mm on July 18. The inundation has taken a toll of at least 32 lives, and the majority of victims died in landslides that crushed their slum houses at Mahul in Chembur. These deaths of despair recur almost every year, soon to be forgotten in fair weather in a city that prides itself on its enterprise and resilience. In the second year of the CO-VID-19 pandemic, the monsoon malady poses a double jeopardy, adding to the economic misery of the vulnerable who live in hovels in suburban landslide-prone locations. Such dire conditions stand in contrast to Maharashtra's keen desire to keep Mumbai as the country's pre-eminent financial metropolis. The limitations in its infrastructure to accommodate intense monsoons, and its notorious inability to provide affordable inner city housing to the less affluent and even the middle class, are making other cities look more attractive.

The catastrophic floods in Mumbai and Chennai in 2005 and 2015, respectively, resulted in the emergence of a management plan drawn up by the National Disaster Management Authority and later, the first dedicated storm water drainage manual by the Ministry of Housing and Urban Affairs. But such initiatives can do little if States, which have both power and responsibility over city affairs, do not feel compelled to address the challenges posed by urbanisation. In fact, Mumbai's inability to manage recurrent floods and the needs of a massive slum population was highlighted by a fact-finding committee appointed by the Maharashtra government after the 2005 deluge, with calls to liberate the city's rivers and lakes from various impediments, enable perennial flow in the Mithi river, create fresh holding lakes for excess waters, and rehabilitate those who live in risky locations. There is a need to clear the air on the followup to these and other expert recommendations, which the State can do through a white paper. Mumbai's neglect is not unique, though, and most big cities are amorphously expanding to the suburbs where basic infrastructure including drainage is absent, and lakes and rivers are heavily encroached, often with political support. Such unplanned growth, with no defences against weather disasters, is leaving cities a lot poorer.