There will be more floods. Be prepared

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The number of people exposed to floods worldwide has increased by almost a quarter over the last two decades, according to an analysis of satellite-based data by Columbia University's Earth Institute. The report, published in *Nature* last week, has three main findings. One, nearly 86 million people, driven by economic necessity, moved to flood-prone regions between 2000 and 2015. Two, the majority of flood-prone countries are in South and Southeast Asia. Three, most flood events were caused by excess rainfall.

Floods happen due to both heavier than normal rainfall, and the limited capacity of rivers, drainage and water harvesting structures to discharge excess rainwater. The climate crisis is causing substantial disruptions in monsoon patterns, and scientists warn that floods will only become more frequent and powerful. To minimise loss, planners need to combine traditional knowledge (which saw floods as a natural process one had to find ways to live with), robust data, and innovative strategies.

Conventionally, hard infrastructural solutions — such as embankments and dams — have been popular to reduce the impact of flooding. But there is now a shift towards nature-based solutions due to their co-benefits. For example, while mangroves protect coasts, they also support fisheries and food security, and act as a carbon sink. Cities are also trying out new methods such as developing a network of green areas, which can absorb excess water, and porous pavements to tackle urban flooding. To reduce the impact of flooding, it is also critical to go back to basic practices: Plant more trees, restore water bodies, improve soil cover with plants, and stop destroying and encroaching on the floodplains of rivers. India needs to pay heed.