

IIT Mandi gives recommendations to tackle future pandemic outbreak

06 January 2022 | News

According to the study, a robust emergency plan to mitigate the spread of the next pandemic needs to be carefully planned

Researchers from the Indian Institute of Technology (IIT) Mandi have identified the states with a high probability of being the first hotspots for the spread of COVID-19. The researchers reviewed the spread of COVID-19 and past pandemics in India for this study.

According to the study performed on 640 districts from April 1 to December 25, 2020, the hotspots of the pandemic in India have been states with high international migration and districts located close to large water bodies.

States such as Maharashtra, Tamil Nadu, Gujarat, Rajasthan, Karnataka, Delhi, Uttar Pradesh, and Andhra Pradesh were the hotspots for the COVID-19 pandemic in India.

Furthermore, the researchers have examined the temperature variations across districts that are close to large bodies of water to understand the spread of COVID-19 in these areas.

In epidemiology, the basic reproduction number, commonly known as R_0 , quantifies the disease spread and finds the expected number of cases directly generated by one case in a population.

Researchers recommend a targeted approach to be taken in states with a higher international migration rate and recommend that strict precautionary measures should be taken in districts near large bodies of water before the monsoon season begins.

The high R_0 observed in these districts during monsoon suggests that these areas be given priority if immunization is available.