

Understanding the spatio-temporal pattern of COVID-19 outbreak in India using GIS and India's response in managing the pandemic

Rakhohori Bag, Manoranjan Ghosh, Bapan Biswas, Mitrajit Chatterjee

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Abstract

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Due to the outbreak of Coronavirus, humans all over the world are facing several health problems. The present study has explored the spatio-temporal pattern of Coronavirus spread in India including spatial clustering, identification of hotspot, spatial heterogeneity, and homogeneity, spatial trend, and direction of COVID-19 cases using spatial statistical analysis during the period of 30 January to 20 June 2020. Besides, the polynomial regression model has been used for predictions of COVID-19 affected population and related deaths. The study found positive spatial heterogeneity in COVID-19 cases in India. The study has also identified 17 epicentres across the country with high incidence rates. The directional distribution of ellipse polygon shows that the spread of COVID-19 now trending towards the east but the concentration of cases is mainly in the western part of the country. The country's trend of COVID-19 follows a fourth-order

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References Related Information

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