

Comprehending The Epidemic Outbreak and Its Financial Implications Through Mathematical Modeling

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ABSTRACT

In December 2019 a new pandemic sickness was introduced in our society which was termed as COVID 19 and was caused by the virus SARS CoV-2 which is constantly evolving into new variants over the time. Its spread was so enormous and lethal for the communities that the disease dissipated millions of life in thin air. In order to stop this chain from spreading, the government was compelled to implement preventive measures like lockdowns and social isolation. The government's harsh policies caused a sharp decline in GDP, which rocked the country's economy. In order to better understand the epidemic outbreak and its financial effects, the equilibrium and stability of the suggested mathematical model along with the numerical data are examined in this work.

Keywords: Boundedness, Equilibrium points, Local Stability

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