

Effect of Migration on Population Growth under Dynamical System

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Abstract

Migration has a significant effect on the socio-economic structures of different countries. The nature of growth for developing countries like India, Bangladesh, Nepal etc is quite complicated and can not be explained by simple growth curves like Gompertz, Logistic etc. In the present work attempts have been made to explain the nature of population growth by an extended modified logistic model and to study dynamical systems of population and migration through differential equations. The stability of the systems has been checked both for deterministic and stochastic versions. A numerical simulation has been carried out.

Keywords: Migration, population growth, logistic model, stability, simulation.

2000 Mathematics Subject Classification: 62P99.