A Model for Sex Ratio Decline in India

A.K. Thukral

Department of Botanical Sciences, Guru Nanak Dev University, Amritsar, Punjab 143 005, India

KEYWORDS Sex Ratio, Population Growth, Variation

ABSTRACT The sex ratio in India has declined from 972 females per 1000 males in 1901 to 929 females per 1000 males in 1991. A model had been proposed for the quantitative analysis of the problem in the form, \( \ln \left( \frac{x_t}{y_t} \right) = \ln \left( \frac{x_0}{y_0} \right) - 2st \), where \( x_t / y_t \) represents the number of females per male at time \( t \), \( x_0 / y_0 \) is the initial sex ratio and \( s \) is the differential growth rate component which discriminates the growth of the female population from that of the male. The study reveals that there has been a sex discriminated population growth in India in the twentieth century, although that rate of decline of the female has decreased. If the current trend of population growth continues, there will be a further decline in the female population.