

Age Distribution Model for PNG Population

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Abstract

Efficient and reliable estimates of the proportions of population at different age levels for a particular year are very important for making quality budget of any developing or developed nation. These estimates are obtained from the best-fitted age distribution model and can be used to find the number of school age children, unemployment rate, number of pensioners etc. Past census data of Papua New Guinea (PNG) are analyzed and observed that the age distribution of the PNG population is exponential. Applying exponential distribution the population figures for different age groups of PNG are estimated. Age distribution of PNG population is compared with that of other developed nations. It is observed that unlike other developed countries of the world, the age distribution of PNG population do not change significantly over the last five decades. It is also observed that the median age of PNG population is about half of that of other developed nations.

Keywords: Probability distribution, Chi-square goodness of fit test, Model selection.

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