



**Centro de Investigação em Matemática e Aplicações
Departamento de Matemática**

Seminário

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Mathematical modeling of mortality for countries with limited and defective data

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Resumo

Life tables explain the mortality experience of a group called cohort. The survivorship function plays a vital role in life tables. In developing countries with limited and scarce data, survivorship function is taken as an index of development and is used by policy makers and planners. Inefficient registration of vital events and geographically remote areas in many developing countries hinder the regular availability of accurate data. Hence mathematical modeling of such data is of utmost importance because of their role as development indicators. In this paper, survivorship function of a developing country particularly Nepal is regressed on age and time variables. A comparison of results is made between the data of countries with abundant and good quality data on one hand and limited and defective data on the other hand. Further the uncertainty in Nepalese data is measured by analyzing the error in the model parameters.