Session 10: Capacitating (teaching and training) in new methods and projection tools: national and international cooperation

PRODEX: Demographic projections in Excel environment.

Abstract

PRODEX is an application developed in Excel (with macros in Visual Basic) to create population projections for countries or regions. It was made to replicate the benefits offered by PRODEM (created by CELADE in the nineties under the DOS operating system). This is an application easy to use with a flexible user interface that allows making the projections in a friendly way without "black boxes" that hinder the understanding of processes and the information management. The application aims to develop estimates and projections of population by sex and single years of age and calendar year using the "component method" based on the balancing equation by sex and age, and the consideration of the future evolution of the variables determinants of population dynamics. The program requires as INPUT the number of persons by sex and single ages for a base year and the levels and age structures of the three components of population change (fertility, mortality and migration) for the project period. The application also has modules to facilitate projections of each of the components based on models and trend curves. The obtained OUTPUT is the projected population by sex and single ages (and five-year), births, deaths and a number of summary indicators of population for each calendar year in the specified period. This tool also allows the sum of projections in order to obtain the projection of a larger area from the projections of the areas that comprise it.