



## Hands-on Exercise – Mortality

### 1. Life table

Using the deaths in the household in the previous 12 months (or other reference period used) by sex and 5-year age group collected in the census:

- a. Calculate the period life table for men and then women using the application LIFTB in MORTPAK;
- b. Create a figure of the probability of dying ( ${}_nq_x$ ) (use a logarithmic scale for  $y$ -axis);
- c. Calculate the  $5q_0$  and  $45q_{15}$  estimates using the  $l_x$  the from the life table;
- d. What can you say about the data quality of mortality data?

### 2. Brass-Type estimates (CEB/CS)

Using the data from the summary birth history collected in the last two censuses:

- a. Calculate mortality estimates using the application QFIVE in MORTPAK;
- b. Create a figure of the under-five mortality and the life expectancy at birth using the most appropriate Model Life Table (use the Excel worksheet “Comparison\_1q0\_4q1\_with-Model-Life-Tables.xlsx” to determine the Model Life Table);
- c. What can you tell about mortality change and data quality?

### 3. Discussion/Conclusion

Create a figure including the different estimates of life expectancy at birth.  
What can you tell about mortality change and data quality?