

**Department of Demography
Faculty of Arts
University of Colombo**

Certificate Course in Methods of Data Evaluation

Introduction

The course has been developed in recognizing the importance in data evaluation of Census Births, Deaths and Migration. The participants would reflect on theoretical and practical knowledge on the methods of data evaluation. Further the certificate course will develop confidence and skills that are required in evaluating demographic data effectively in academic and professional platforms.

Objectives

The objectives of this Certificate Course are as follows:

1. To introduce methods of evaluation of census data, completeness of vital statistics, use of indirect techniques and adequacy of migration statistics.
2. To provide a broad range of knowledge required in evaluating census data including the knowledge about quality of census data, identification of errors in census data, comparison of data from various sources, consistency of vital statistics and techniques in evaluation of data.

Target Groups

This certificate course is designed for local and international participants; A/L pass outs, undergraduates, graduates and professionals who are interested or obliged to gain knowledge to improve skills in demography and statistics.

Admission Requirements

To be admitted as a student of this course, a candidate should possess any one of the following qualifications:

- a) Completion of G.C.E. (A/L) Examination with certified work experience in a relevant field equivalent for minimum six months

OR

- b) Undergraduate/graduate from a state or private university

OR ANDAND

- c) Professionals with minimum of six months working experience in a relevant field
- d) Be at least 18 years of age
- e) Should possess basic knowledge in demography/statistics

Medium of Instruction

English

Course Fee

Local participants: Rs. 20,000 per participant

International participants: USD 300 per participant

Course Duration

15 Weeks (90 Hours)

Teaching Methodology

- Lectures – online/offline
- Discussions/ lab sessions
- Quizzes and activities
- Lecturer guided self-studies
- Extensive use of case studies

Evaluation

Method	Marks (Out of 100)
Assignments (Individual/Group)	40
Class Attendance	10
Final Examination	50
Total	100

Pass mark for the course: 50%

Syllabus

1. Methods for Evaluation of Census Data
 - 1.1. Methods for overall assessment of census quality
 - 1.2. Identification of sources of errors
 - 1.3. Types of Census Error:
 - 1.3.1. Coverage versus content error
 - 1.3.1.1. Omissions

- 1.3.1.2. Duplications
 - 1.3.1.3. Erroneous inclusions
 - 1.3.2. Net versus gross error
 - 1.3.3. Sampling versus non-sampling error
 - 1.3.4. Methods based on a single source of data
 - 1.3.4.1. Demographic analysis
 - 1.3.4.2. Interpenetration studies
 - 1.4. Methods based on comparison of data from two or more sources
 - 1.5. Matching studies
 - 1.5.1. Post-censal matching surveys
 - 1.5.2. Reinterview surveys
 - 1.5.3. Record checks
 - 1.5.4. Comparison with existing household surveys
 - 1.6. Non-matching studies
 - 1.7. Demographic analysis using previous censuses
 - 1.7.1. Comparison with administrative records
 - 1.7.2. Comparison with existing household surveys
- 2. Completeness of Vital Statistics
 - 2.1. Effects of errors in vital statistics on population estimates
 - 2.1.1. Coverage
 - 2.1.2. Time and place of occurrence
 - 2.1.3. Factors affecting the completeness of birth registration
 - 2.1.4. Relative completeness of birth and death registration
 - 2.2. Internal consistency of vital statistics
 - 2.2.1. Numbers of reported births, deaths and infant deaths
 - 2.2.2. Levels of rates
 - 2.2.3. Birth rates
 - 2.2.4. Consistency of crude birth rates with age structure
 - 2.2.5. Death rates
 - 2.2.6. Infant mortality rates
 - 2.2.7. Trends in crude rates
 - 2.2.8. Patterns of death rates, by age and sex
 - 2.3. The use of balancing equations

- 2.3.1. Appraisal of death statistics by means of balancing equations
 - 2.3.2. Appraisal of birth statistics by means of balancing equations
 - 2.3.3. Application to the subdivisions of a country
 - 2.4. Direct checks on completeness of vital statistics registration
3. Use of Indirect Techniques
- 3.1. Estimates of completeness of birth registration from Brass method on comparison of period fertility rates from reported average parities
 - 3.2. Completeness of death registration from population enumerated at two points in time classified by age
4. Adequacy of migration statistics
- 4.1. Adequacy of international migration statistics
 - 4.2. Use of the balancing equation
 - 4.3. International comparison
 - 4.4. Direct checks
 - 4.5. Adequacy of statistics on internal migration
 - 4.5.1. Census statistics relating to internal migration
 - 4.5.2. Continuous population registers
 - 4.5.3. Tests of data on place of birth
 - 4.5.4. Tests of data on place of residence at a previous date
 - 4.5.5. Direct checks

For Further Information Contact

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