

## Applied Statistics in Community Development Projects

*The course will provide you knowledge, skills & confidence in performing statistical analyses in quantitative surveys, project evaluation or other studies used in community development projects*

### Objectives

At the end of the course, participants should be able to:

- Understand procedures in data analysis.
- Understand the reasoning process from project indicators, study design, sampling design & data errors to statistical analysis.
- Be updated on statistical analysis techniques applied in community development interventions
- Use statistical software SPSS/STATA in practicing selected common statistical analysis (descriptive, analytical and multi-variable analysis)

### Course length: 5 days

Course 1: 31 Jan – 4 Feb

Course 2: 1-5 Mar

Course 3: 5-9 Oct

### Trainer:

**Dr. Tran Tuan MD. PhD.**

**Tran Duc Thach BSc. MSc.**

### Course Agenda

#### Day 1: Introduction to applied statistics & community development projects

- ✧ Types of data
- ✧ Sources of data and criteria of selecting data for analysis
- ✧ From indicators, sampling design, errors to statistical analysis
- ✧ When a community development project needs statistical analysis
- ✧ Common forms of statistical analysis presented in community development projects

#### Day 2: Descriptive analysis & software

- ✧ Summarizing data
- ✧ Presenting data
- ✧ Interpreting data
- ✧ Descriptive analysis in com. dev. projects
- ✧ Lab practice: SPSS/STATA in descriptive analysis

#### Day 3: Analytical analysis & software

- ✧ Estimation and hypothesis testing
- ✧ Comparing groups and statistical tests
- ✧ Presenting & interpreting data
- ✧ Analytical analysis in com. dev. projects
- ✧ Lab practice: SPSS/STATA in analytical analysis

#### Day 4: Multi-variable analysis & software

(Identifying potential risks & cause-sequence relationship)

- ✧ When a multi-variable analysis is needed
- ✧ Regression & correlation
- ✧ Multi-variable analysis in com. dev. Projects
- ✧ Lab practice: SPSS/STATA

#### Day 5: Making a file ready for analysis

- ✧ Pooling selected variables into a file
- ✧ Data cleaning
- ✧ Working with missing values
- ✧ Lab practice, Question and Answer