

**Agenda**  
**Training on CGE modeling**

**2 – 6 March 2020**

**(Tunisia)**

This introductory training will allow participants to be able to construct and use input-output models, SAM multiplier models and a basic CGE model describing an open economy with government.

**Session 1: Input output table and SAM**

1. Input-output (IO) tables: structure and main utilization
2. SAM: structure and main utilization

**Session 2: Input output and SAM multiplier models**

1. Constructing a SAM and computation of input-output and SAM multipliers: a case study
2. Simulations using IO and SAM multiplier models

**Session 3: Theoretical development of a basic CGE model**

**Session 4: Presentation and use of the CGE through the UNESCWA interface**

**Session 5: Get used to the GAMS software**

**Session 6: How to construct a CGE model**

**Session 7: Social Accounting Matrix and calibration of the model**

- 1 Presentation of the social accounting Matrix of the theoretical model developed during the preceding sessions
- 2 Calibration of the model.

**Session 8: Functional forms in CGE models**

- 1 Main functional forms used in CGE models (Cob-Douglas, CES, LES)
- 2 Calibration of the main functional forms

**Session 9:** Constructing a closed economy 2 sectors CGE model using GAMS

Presentation of the structure of a model programmed in GAMS language.

**Session 10:** Implementation of the model developed during the last sessions in GAMS.

**Session 11:** Calibration and Simulation of the model.

**Session 12:** Introduction of the government in the model: Definition of government equations.

**Session 13:** Implementation of the model developed during the last sessions in GAMS.

**Session 14:** Calibration and Simulation of the model.

**Session 15:** Modeling an open economy with government: Definition of external trade equations.

**Session 16:** Implementation of the model developed during the last sessions in GAMS.

**Session 17:** Calibration and Simulation of the model.

**Session 18:** overview of the model construction for Tunisia

**Session 19:** overview of the model construction for Tunisia

**Session 20:** Simulation of energy reform option in Tunisia