

## **ESCWA's activities using GTAP databases**

### **Assessing alternative scenarios of Common External Tariff under the Arab Customs Union Initiative on the Sudanese Economy**

ESCWA integrated a SAM of Sudan in an aggregated version of GTAP database. The results of the simulation analysis using MIRAGE model will be presented in Khartoum next July and a report will be finalized based on the revisions to be made. ESCWA is also preparing to support Sudan in formulating a trade strategy and development in the country. Part of which will use and customize the results of the model in assessing and measuring the impact of alternative trade reforms on the economy.

### **Assessing alternative scenarios of CET on the economies of Tunisia and Egypt**

As part, a cooperation between ESCWA and the MCs. ESCWA received requests from Tunisia and Egypt to evaluate alternative scenarios of ACU on their economies. The MIRAGE model is being used for that purpose based on the latest version of the GTAP database. However, the GTAP database will be improved (or adjusted) to reflect the fiscal accounts of the two countries as well as the other Arab countries covered by the database.

### **Assessing the implications of the implementation of VAT in GCC country**

We used MIRAGE, to assess the implication of the implementation of a 5% Value added tax in the six GCC countries starting from 2018. The model will allow an assessment of the net impact of the reform by comparing the variation between the Businesses as usual scenario, as predicted by the IMF and the simulation results. We simulate the shock with two closure rules. In the first one we suppose public expenditure remains unchanged and public deficit is exogenous so the VAT revenue to reduce public deficit. In the second one, we suppose the fiscal deficit exogenous and government expenditure is supposed endogenous so the VAT revenue is directly used to increase public expenditure.

### **Assessing the regional implications of countries in Crisis (Libya and Syria)**

As part of ESCWA's work on Libya and Syria as countries in conflict, ESCWA uses the MIRAGE model to assess the regional implication of the crisis in these countries. Including an assessment of the implication of various reconstruction scenarios on the Arab Region, Europe, and Sub-Saharan African Countries using a multicountry approach. We define reference scenarios for the country in conflict and affected countries involved in addition to defining the reconstruction scenario including specific macroeconomic and sectoral policy reforms. The Mirage model then will be dynamically calibrated to incorporate new regional and sectoral disintegration and reproduce the reference scenario/s.