

**2016 GTAP-Related Activities**  
**Economic Research and Regional Cooperation Department (ERCD)**  
**Asian Development Bank**

**A. Recently completed**

1. Lecture on the Five Shared Socioeconomic Pathways: The Economic Research and Regional Cooperation Department (ERCD) of the Asian Development Bank (ADB) invited Dr. Dominique van der Mensbrugghe of the Center for Global Trade Analysis, Purdue University, to deliver a lecture on the Asia Development Policy “The Five Shared Socioeconomic Pathways, Income Distribution, and Emissions: Focus on Asia”, last 21 March 2016. The pathways are designed to span the spectrum of potential outcomes for the global economy along two broad axes relating to the challenges of adaptation and mitigation. 41 people, comprising ADB staff and external participants, attended the lecture. Dr. Dominique van der Mensbrugghe also met and discussed GTAP-related projects with ERCD staff.
2. GTAP Training: The ERCD also organized a two-day introductory training course of the GTAP database and model last 29-30 March 2016. The introductory course aimed to develop basic skills needed to conduct policy simulations and analyze GTAP model results. It also helped introduce staff to the GTAP-101 and other more advanced GTAP short courses. 10 ERCD staff completed the training.
3. Production of new input-output databases: Under the Regional Technical Assistance (RETA) 6483, the ADB assisted 18 economies in Asia and the Pacific to develop supply and use tables (SUTs) and input-output tables (IOTs). The IOTs are useful for developing macroeconomic models and conducting price impact analysis. The countries included are: Bangladesh; Bhutan; Brunei Darussalam; Cambodia; People’s Rep. of China; Fiji; India; Indonesia; Malaysia; Maldives; Mongolia; Nepal; Singapore; Sri Lanka; Taipei,China; Thailand; and Viet Nam. The ADB can share these IOTs if it’s useful to the GTAP database.

**B. On-going**

4. Greening Asia’s Growth: The theme chapter of the 2016 Asian Development Outlook Update (ADOU) focuses on green growth opportunities for Asia, low-carbon growth strategies in developing Asia, and the economics of weather-related shocks and global climate stabilization. As part of the theme chapter, several background papers are currently in preparation with some using GTAP-related database or approaches. A short description of a GTAP-related paper follows:
  - a. Developing Asia and the Economics of Global Climate Stabilization -- This paper applies the ENVISAGE GTAP database driven computable general equilibrium model to assess

the implications of the Paris Agreement on climate change under different assumptions regarding its evolution and implementation. It assesses the effects of climate policy on land use, energy and economic systems, the means by which mitigation can be most efficiently achieved, and the benefits from mitigation in terms of reduced losses from climate change.

2. GTAP Application on One Belt, One Road (OBOR): This paper attempts to quantify the impact OBOR might have on Asia's trade and growth. The paper conducts two policy simulations to assess: (i) the impact of OBOR on transport margins—both road and sea transport margins—to see how physical connectivity can be enhanced through road projects and port improvement; and (ii) the impact of OBOR on trade margins to capture the effect of enhanced trade facilitation measures in the region. The paper will be presented during the GTAP 2016 19<sup>th</sup> Conference on Global Economic Analysis.

### **C. Future work**

3. Labour market adjustment costs: ERCD is keen to analyse how labor market adjustment costs make economies in Asia more or less resilient. Currently, labor productivity in the region is falling and a key underlying reason is labor market rigidity. A CGE study could help us understand how labor market reform can reduce this labor market adjustment costs and make Asian economies more resilient in the face of economic and policy shocks.