

GTAP Board Report
International Food Policy Research Institute
July 2007 – June 2008

The International Food Policy Research Institute (IFPRI) intends to provide continuous support to the development of the GTAP as a tool for quantitative economic analysis of global issues in a way which is useful for policy analysis and accessible to research centers from developing countries. During the last several years, IFPRI has established close collaboration with research centers in many developing countries. This collaboration has drawn IFPRI's attention to numerous challenges confronting developing country research centers, including a key concern about the cost of gaining access to advanced policy analysis tools, among others, the GTAP database and the General Algebraic Modeling System (GAMS) software. As a result, the availability of these resources to developing countries is critical in order to enhance their analytical capacity.

During 2007, two staff members joined IFPRI's trade research team: Dr. Betina Dimaranan, formerly research economist and the database administrator at Purdue University's Global Trade Analysis Project (GTAP), and David Laborde, formerly at the Centre d'Etudes Prospectives et d'Informations Internationales (CEPII) in France and an architect of the Market Access Map (MAcMap) global tariff database.

Completed and ongoing projects

IFPRI makes an extensive use of the GTAP database in its research on trade issues. During the course of one year between July 2007 and June 2008, IFPRI relied on the GTAP database for numerous projects ranging from training courses on policy analysis taught in developing countries to various analyses of regional and multilateral trade agreements.

Under a project supported by the Hewlett Foundation, IFPRI conducted four-week training courses in Senegal and Sri Lanka. Each country course included, among others, training in general equilibrium modeling using the MIRAGE (Modeling International Relationships in Applied General Equilibrium) model.

Between July 2007 and June 2008, IFPRI has carried out seven major research projects using the MIRAGE model which relies heavily on the GTAP and MAcMap databases. These projects are as follows:

- Africa's marginalization in the global trade: this study identified some of the key reasons behind Africa's marginalization in global trade and suggested ways to improve Africa's trade participation worldwide through improved market access and infrastructure. Part of this research will be presented at the Helsinki conference.
- Duty-free quota-free market access for least developed countries (LDCs): this project demonstrated that such a preference, as proposed in the Doha negotiations at the Honk Kong Ministerial, increases the gains for these poor countries from an international trade agreement.
- Economic partnership agreements (EPA) between the EU and African, Caribbean, and Pacific (ACP) countries: the project analyzed the impact of EPAs on Africa in general and highlighted challenges that the EPA poses to Senegal in particular.

- Quantitative assessment of the potential impacts of a Common Market of Eastern and Southern Africa (COMESA) customs union: this analysis involved four scenarios comparing the impacts of the customs union under two alternative specifications of sensitive products, and the impacts of three alternative membership assumptions on the COMESA countries. This paper will be presented at the Helsinki conference.
- Prospective impacts of greater economic integration of the Maghreb countries: this study assessed the impact of alternative FTA configuration amongst Maghreb countries and the EU and the USA.
- United States-Peru trade agreement: this project examined the implications of a trade agreement between the United States and Peru. This research was further extended to consider the effects of a free trade agreement between Peru and China which was found to have a positive income effect in Peru.
- South Asia Free Trade Area (SAFTA): this project focused on identifying relative gains and losses among the member countries and the effects on the results of exempting certain products from the agreement.
- Caesar Cororaton carried out a study that analyzes the poverty and inequality implications of removing agricultural and non-agricultural price distortions in the international and domestic markets of the Philippines. This paper will be presented at the Helsinki conference.

Additional work focused on data and methodological improvements at IFPRI included:

- A study on tariff aggregation schemes, carried out by Antoine Bouet and Hedi Bchir which provided empirical comparisons of five tariff aggregators (simple average – trade weighted average – world trade weights – reference group – MTRI) using the 2001 and 2004 MAcMap databases.
- In collaboration with the CEPII, David Laborde continued updating the latest version (2004) of the MAcMAP tariff database.
- Social Accounting Matrices for several African countries: IFPRI has recently made available either directly or through country collaborators the SAMs for several African countries like Ghana and Kenya.

Future projects and priorities

A key issue of interest for IFPRI and for an increasingly large number of GTAP users is the issue of biofuels. Recently, IFPRI has been commissioned by the European Commission to carry out a study on biofuels in collaboration with CEPII. This study intends to do the following:

- disaggregate the GTAP database into specific biofuels crops and products, and land use patterns for these crops, for all countries and regions.
- improve the modeling of energy in the MIRAGE model.
- improve the modeling of land supply and land mobility in MIRAGE
- obtain better information on biofuels program support

This study is expected to be completed by the end of 2008.

The GTAP database continues to be a valuable resource for our research projects; therefore, we are eager to contribute to its further development. While the database has undergone much improvement in the past and continues to play a vital role for our research, further improvements are important in order to uphold its credibility as a reliable resource in trade policy analysis. To this extent, improvements in two areas would be highly valued. First, updating the Social Accounting Matrices for many countries is highly important since in many cases they tend to be outdated. Second, in order to maintain high levels of quality research in the development domain, it is critical to have comprehensive data for African countries. Therefore, such improvements would be extremely valued by the GTAP users. This is already high on the GTAP agenda and we hope that it will remain a key priority for the new GTAP version.