

Environment Directorate Activities related to GTAP

- A. In 2012, the OECD Environment directorate has used its ENV-Linkages CGE model that is based on GTAP data to complete the *OECD Environmental Outlook to 2050* – ENV-Linkages is used extensively, especially in the Socioeconomic developments and Climate change chapters. The Environmental Outlook to 2050 is done in collaboration with the Netherlands Environmental Assessment Agency PBL, and their IMAGE suite of models.
- B. ENV-Linkages has also contributed to the IEA's World Energy Outlook, through an analysis of the macroeconomic consequences of an ambitious package of energy efficiency measures. A more detailed report on the modeling aspects will be released in 2013 as OECD report.
- C. Work is ongoing on ENV-Growth, a long-run macro projection tool to build long-run scenarios for 185 countries over the period 2010-2100. The model is currently used to quantify economic projections for the Shared Socioeconomic Pathways (SSP) storylines developed by the Integrated Assessment Modelling Consortium (O'Neill et al., 2012). But these macro projections (to be presented at a session in the GTAP conference) could obviously be used by the GTAP community as well, and we're thinking of releasing the SSP projections at the GTAP regional aggregation level.

Trade and Agriculture Directorate Activities Related to GTAP

- D. From the trade side, we are using GTAP as the basis for our new trade model (to be presented at a session in the GTAP conference). The model will be used to examine a variety of trade policy issues including export restrictions, restrictions in services trade, network or value chain trade analysis, etc. The model development effort will also feed into the OECD-wide initiative on New Approaches to Economic Challenges (NAEC). We expect to have a preliminary version of the model by the end of the year. We intend to make the model and underlying data extensions publicly available sometime in late 2014.
- E. OECD PSE: No major developments since the last board report. The new PSE classification has now been introduced into both the v7 and v8 of the GTAP database. In a significant break from past practice, the new classification no longer calculated PSEs for individual commodities, in recognition that agriculture support is increasingly being provided to several (or all) commodities in aggregate, and in some cases do not require production at all :
(see https://www.gtap.agecon.purdue.edu/resources/res_display.asp?RecordID=3154). Part of the category of payments "Other Transfers to Producers" (E- payments based on non-current area/animal number/ receipts/income, production not required) are allocated equi-proportionally to all commodities and all factors of production, while the rest (F- payments based on non-commodity criteria and G – miscellaneous payments) are considered not to be linked to commodity production.
- F. Network activities - Work on Long-Term Scenarios on world agricultural markets: This work started with a workshop held in October 2010 ('Long-term scenarios: Supporting robust policies for global agriculture and food'), where a broad selection of different models, including the partial equilibrium model IMPACT/Global Change Model (IFPRI), general equilibrium models ENVISAGE (The World Bank) and LEITAP/IMAGE (LEI/PBL), and the expert-based platform Agrimonde (CIRAD/INRA) were compared. Subsequently, specific activities have been undertaken on comparison of long run results (2050) across models, and

this work has been expanded to a total of eventually 10 models (four partial equilibrium models, six computable general equilibrium models) and integrated into the larger Agricultural Model Intercomparison and Improvement Project (AgMIP – www.agmip.org). In addition to comparing scenario results and analysing their differences, this project also aims at informing the Fifth IPCC Assessment Report on Climate Change (AR5). The work resulted in a series of papers submitted to Agricultural Economics (AE) and Proceedings of the National Academy of Sciences (PNAS), for publication in special issues in summer 2013.