



## GTAP related work at FOI, 2007/08

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### *FTA*

FOI has and is working actively with tralac (Trade Law Centre for Southern Africa), modelling regional FTA between South Africa and a number of countries using the GTAP database. This work has resulted in the publication of a book in 2007 “*South Africa’s way ahead: trade policy options*” and a tralac working “*Trade Policy options for Nigeria: a GTAP simulation analysis*”. Further work is on going with tralac which should result in a second book being published some time in 2008.

### *WTO Doha*

Work has also been commissioned by the Danish Agricultural ministry in quantifying the possible effects of a WTO Doha round agreement on Agriculture and NAMA (Non Agricultural Market Access).

### *Domestic support*

Work is ongoing modelling changes to agricultural domestic support in China using the GTAP version 7 database. Working paper forth coming.

### *Endogenous technology spillovers through trade*

Work has also been undertaken modelling endogenous technology spillovers through trade using the GTAP database and a working paper is also forth coming.

### *Incorporation of land supply curves in the standard GTAP model*

In collaboration with the Danish Technical University, FOI is working on a modification of the standard GTAP model to allow for flexible (but limited) supply of land. We subdivide land rent from the GTAP database into two types of land, cultivable land, which may be used by both crop and livestock sectors, and pastureland, which is only suitable for livestock production. Subsequently, we construct region-specific land supply curves for both land types, similar to those introduced by van Meijl et. al. (2006), using data supplied by Professor Navin Ramankutty of McGill University, Montreal. To test the modifications, we simulate a shift in demand (towards wheat) in different countries and analyse the consequences for supply of new land. Apart from general methodological development, results are intended for use within the field of Life Cycle Analysis. This work has resulted in the publication of one working paper in 2008 and one submitted journal article.

## GTAP related publications/presentations by FOI

### Book

Sandrey, R., H.G. Jensen, N. Vink and T. Fundira (2007) *South Africa's Way Ahead: Trade Policy Options*. Trade Law Centre for Southern Africa (tralac) 2007 ISBN 978-0-9584680-7-7.

### Working papers

Wusheng Yu and H. G. Jensen (2008) *Modelling Agricultural Domestic Support in China: recent policy reversals and two future scenarios*. Forth coming FOI working paper

Baltzer K. and Kløverpris. (2008), *Improving the land use specification in the GTAP model*. FOI working paper No 02/2008, February 2008.

Wusheng Yu (2007) *Schemes for aggregating preferential tariffs in agriculture, export volume effects and African LDCs*. FOI working paper No 12/07 August 2007

Sandrey R., H G Jensen and Oyewumi O. (2007), *Trade Policy options for Nigeria: a GTAP simulation analysis*. tralac working paper No 10/2007, December 2007 [www.tralac.org](http://www.tralac.org)

### Submitted journal article

Kløverpris, Jesper, Kenneth Baltzer and Per H. Nielsen, Land Use in LCA: Life Cycle Inventory Modelling of Land Use Induced by Crop Consumption. Part II: Example of wheat consumption in Brazil, China, Denmark and the USA, *International Journal of Life Cycle Assessment* (submitted)

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