

# **International Agricultural Trade Research Consortium (IATRC) Symposium**

## ***"Productivity and its Impacts on Global Trade"***

**2-4 June, Seville, Spain**

The International Agricultural Trade Research Consortium (IATRC) co-organized together with the European Commission the 2013 IATRC Symposium on 2-4 June in Seville, Spain. The theme of the Symposium, "Productivity and its Impacts on Global Trade", was addressed through invited presentations and contributed papers on productivity growth in emerging, developing and developed countries.

In the first session, the welcome by Lynn Kennedy, President of the IATRC, and the introduction to the topic by Tassos Haniotis, chair of the organising committee, set the scene for three days of exchange. To broadly introduce the subject, Frank van Tongeren (OECD) summarised the current stage of the discussion, described the work of several international organisations for the G20 and pointed out the importance of productivity in the context of growing demand, limited resources and environmental concerns. Julian Alston (University of California) presented the main conclusions of his work on productivity and the link between R&D and productivity growth, highlighting the considerable time lag in interactions between the two.

The following two sessions focussed on regional developments in productivity growth, highlighting differences in approach, measurement and interpretation of total factor productivity but also looking behind the figures in order to understand the drivers. On the question on whether total factor productivity growth is declining or not in developed economies, most presenters concluded that the recent growth rates are slower than the ones before. The presentations on developing and emerging markets relied less on statistical data and provided more illustrative examples, e.g. the shifting of production regions and transport bottlenecks in Brazil, the lack of R&D investments in Africa, the implications of different farm management in the Ukraine, regional and sectorial differences in India and land and environmental constraints in China.

The fourth plenary session focussed on potential technological breakthroughs concerning productivity, providing participants with food for thought on how agriculture might change in coming decades. Most of the discussed topics (Biotechnology, Nanotechnology, Precision Farming, Irrigation and Fertilisers) are important parts of today's agriculture and have recently undergone substantial changes, with high implications for productivity growth. Which of the new developments will actually become part of the mainstream remains unclear; nevertheless, increasing the use of the already widely applied options already results in a considerable rise in productivity. In this session the role of R&D for productivity growth has been again stressed.

The fifth plenary brought together a mix of technical papers and provided for an introduction into the findings of the FP7 FactorMarkets project. The session considered approaches on the measurements of total factor productivity, on their short-comings and the ways to address such shortcomings for a better assessment of productivity growth. Presentations focused on the impact of weather on factor productivity results and on inter-temporal relationships.

The plenary sessions concluded with the link between productivity growth and trade. Will Martin (Worldbank) emphasised the impact of trade policies on the link between factor input, overall production and labour income in the context of productivity growth, assessing that agricultural productivity growth would be more beneficial for poverty reduction than productivity growth in other sectors. Will Martin's presentation was followed by a lively debate under a policy panel. The policy panel discussion focused on emerging international trade patterns, on public and private R&D development for productivity growth, on the changing macroeconomic setting facing world agriculture and on the declining importance of tariffs compared to non-tariff barriers, as factors which may impact the spreading out of innovation benefits.

In addition to the six plenary sessions, eleven parallel sessions were held, allowing for the presentation of 39 individual papers on the topic, with a considerable share of these papers stemming from the FP7 project FactorMarkets well as papers from the FADNTools project. In the parallel sessions, detailed methodological approaches and specific findings on the measurement of productivity growth have been discussed.

The IATRC summer Symposium offered the unique opportunity to listen and discuss the latest available methods and measurements regarding productivity developments worldwide and the observed and potential trade developments resulting from the different performance of the agricultural sector. Further research is needed to understand how the different speed in productivity growth translates in changes of trade patterns and how trade policy affects this transition. The symposium also addressed the role of investments, especially in R&D, to stimulate productivity growth aimed at poverty reduction and reflected the need for further work to fully assess how productivity and its link to trade can provide the answer to the challenge of food security in the next decades.