

Symposium 3: Climate Change and Total Factor Productivity in the Agricultural Sector

Tuesday 5 April; 15.45-17.00 CET

Session organiser: Jonathan BROOKS, Head, Agricultural and Resource Policies Division, Trade and Agriculture Directorate, Organization for Economic Co-operation and Development (OECD).

Productivity is a key indicator of economic performance of the agricultural sector. Total Factor Productivity (TFP) growth captures the ability to “produce more with less”: more production with a given set of inputs (land, capital, labour, materials), or the same amount of outputs using less inputs. Yet in order to understand the true productivity performance of the agricultural sector it is important to account for the sector’s use of natural resources and its environmental performance. A key requirement for the agricultural sector will be to produce more food to feed a rising world population while reducing GHG emissions. At the same time, the effects of more frequent climate stresses will continue to increase. Hence, a particular priority is to account for climate change in productivity assessments.

Moderator: Jonathan BROOKS

15h45-16h20	<p><i>An overview of the strengths and weaknesses of alternative measurement approaches to incorporating the environment in TFP measurement</i></p> <p>Jean-Christophe BUREAU, Professor, AgroParisTech, Université Paris-Saclay.</p> <p><i>Practical suggestions for accommodating weather and climate in TFP estimates.</i></p> <p>Robert G. CHAMBERS, Professor, Agricultural and Resource Economics, University of Maryland, United States.</p> <p><i>Incorporating Greenhouse Gas Emissions in Agricultural Total Factor Productivity: Preliminary Results</i></p> <p>Frederic ANG, Assistant Professor, Business Economics, Wageningen University and Research Centre, The Netherlands.</p>
16h20-16h50	<p>General discussion</p>
16h50-17h00	<p>Concluding comments and future directions</p> <ul style="list-style-type: none">• Spiro STEFANO, Administrator, U.S. Department of Agriculture Economic Research Service (USDA/ERS), United States