

Carmen Hubbard, Newcastle University, UK



Augusto Mussi Alvim, Pontifícia Universidade Católica do Rio Grande do Sul, Brazil



Guy Garrod, Newcastle University, UK

Brazilian Agriculture as a Global Player L'agriculture brésilienne au plan mondial Brasilianische Landwirtschaft als 'Global Player'

Carmen Hubbard, Augusto Mussi Alvim and Guy Garrod

Brazil is one of the ten largest economies in the world having made rapid economic development in the new millennium. Its Gross Domestic Product (GDP) accounted for almost US\$ 2 trillion in 2015. With the world's fifth largest population (206 million) and land area (852 million hectares), Brazil has a favourable climate which allows it to be one of the major global agricultural producers, supplying food for the domestic and international market. Over the last two decades the country has experienced substantial economic growth in both agriculture and food processing and managed to secure a leading position in international trade. Indeed, Brazil is the world's second largest agricultural exporter and the largest of all exporters of agri-food products to the European Union (EU), with a share of around 12 per cent in 2015 (European Commission, 2016). The contribution of the agricultural sector to the national energy supply via bio-fuels is also notable. This impressive performance can be attributed to a combination of factors, e.g. improvements in productivity, the adoption of new technologies and the structural adjustments following major economic reforms in the 1980s and 1990s. Long-term investment in research and development, human capital, agricultural extension services and infrastructure were also crucial. The improved performance, however,

would have not been possible without the political will of the Brazilian government which worked together with the private sector to formulate sound economic and social policy measures. Despite this success, the sector still faces a series of challenges around competitiveness, structural deficiencies, restrictive regulations, access to finance and further human capital development (OECD, 2015). Overall, there are large disparities in farming systems and incomes, and rural poverty remains an important issue. These are compounded by the recent political crisis and the economic recession, which led to a declining domestic market, a reduction in GDP and public spending.

Le Brésil est le deuxième plus grand exportateur agricole au monde.

This Special Issue aims to provide a comprehensive outline of Brazilian agriculture and its major achievements over the last 20 years, and identify challenges that the sector currently faces. It draws on research provided by academics and specialists from Brazil, US, UK, FAO and OECD. In his Guest Editorial, Alan Bojanic provides an

We dedicate this Special Issue to our colleague, friend and research partner Philippe Bonnal of CIRAD, France. Philippe died in June 2016. The authors would particularly like to thank John Davis and the *EuroChoices* editorial team for all their support and patience and all the referees for their very valuable comments which clearly led to improvement in the articles. A special thanks to Jonathan Brooks from the OECD for facilitating useful links and for his support. G Brasilien ist weltweit der zweitgrößte Exporteur landwirtschaftlicher Erzeugnisse.

overview of the rapid development of agriculture and the improvements in social conditions in the rural areas of Brazil, with a focus on the major policies that have driven these processes. He argues that amongst the factors that contributed to the positive performance of the Brazilian agricultural sector one stands out, the investment in human resources. In a Point du Vue, Jonathan Brooks argues that there are some key challenges to be met over the next decade if Brazil aspires to sustain its agricultural growth, while addressing other major issues such

G Brazil is the world's second largest agricultural exporter.

as poverty reduction and environmental sustainability. Five main articles focus on specific topics. Steven Helfand, Nicholas Rada and Marcelo Magalhães examine the role of large farms (over 500 hectares) in comparison with other farm sizes in Brazil's agricultural performance,

Carmen Hubbard, Augusto Mussi Alvim and Guy Garrod are Guest Editors of this Special Issue on Brazilian agriculture. I would like to thank them for all their work alongside the editorial team in bringing the issue together.

John Davis, Chief Editor



Over the last two decades Brazil has experienced substantial economic growth in both agriculture and food processing.

highlighting that small and medium-size farms cannot be simply ignored. Catherine Moreddu, Elisio Contini and Flávio Ávila describe the Brazilian agricultural innovation system, outlining strengths and weaknesses, and proposing ways to improve its functioning. Ely José de Mattos and Izete Pengo Bagolin provide an overview of the scope of public policies designed to improve food security and support poverty reduction in rural areas, with a focus on the Zero Hunger Program. Carmen Hubbard,

Augusto Mussi Alvim, Ely Jose de Mattos and Lionel Hubbard investigate the nature and pattern of agri-food trade between Brazil and the EU since 2000. Otavio Mielnik, Felippe Serigati and Céline Giner look at the effect of energy and biofuel policies on domestic ethanol supply and demand, and consider the impacts of the economic and political crisis on the sector. The Parlons Graphiques by José Garcia Gasques outlines the role of improvements in total factor productivity as a major source of growth in Brazilian agriculture.

Further Reading

 Alvim, A.M. and Moraes, S.L. (2013). Os Investimentos Diretos Estrangeiros no Agronegócio Brasileiro - 2002-08 [Direct Foreign Investments in Brazilian Agribusiness - 2002-08]. *Indicadores Econômicos FEE*, 40: 105-120.

European Commission (2016). *Monitoring Agri-trade Policy* (Brussels: European Commission). Available online at: http://ec.europa.eu/agriculture/sites/agriculture/files/trade-analysis/map/2016-1_en.pdf. (Last accessed: 11 January 2017).

• OECD (2015). Innovation, Agricultural Productivity and Sustainability in Brazil (Paris: OECD Publishing).

■ OECD/Food and Agriculture Organization of the United Nations (2015). *Agricultural Outlook 2015*, Special chapter 'Brazilian agriculture: Prospects and challenges' (Paris: OECD Publishing). Available online at: https://doi.org/10.1787/agr_outlook-2015-en.

Carmen Hubbard, Newcastle University, UK. *Email: carmen.hubbard@ncl.ac.uk* Augusto Mussi Alvim, Pontificia Universidade Católica do Rio Grande do Sul, Brazil. *Email: augusto.alvim@pucrs.br*

Guy Garrod, Newcastle University, UK. Email: guy.garrod@ncl.ac.uk