



GM crops in emerging economies

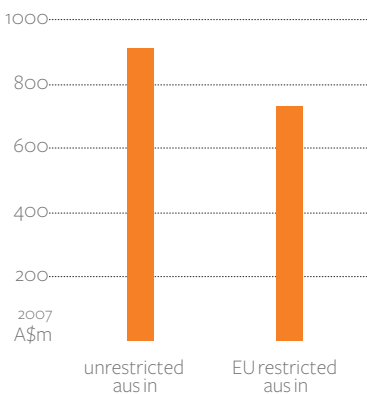
impacts on Australian agriculture

from abare research report 08.3

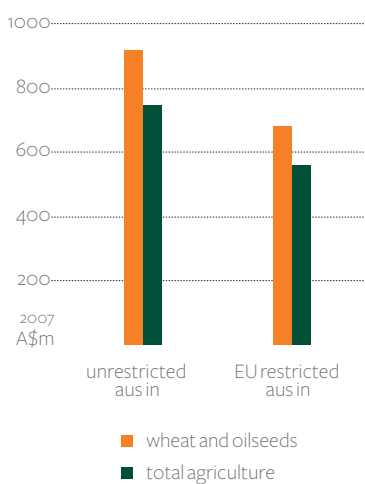
- If Australia adopts GM (genetically modified) oilseeds and wheat, there will be a gain to Australia’s export competitiveness and world market shares, leading to higher agricultural exports and economic activity in Australia.
- Under the assumption that imports of GM crops are not restricted in foreign markets, the estimated gain to the Australian economy (measured by gross national product) would be around \$912 million (in 2007 Australian dollars) by 2018 relative to what would otherwise be the case.
- Under an alternative scenario where it is assumed that the European Union bans imports of GM crops from GM adopting countries, the estimated gain to the Australian economy of adopting GM oilseeds and wheat would reduce to \$732 million in 2018, compared with what would otherwise be the case.

increases in Australian economic activity and agricultural exports (free on board) in 2018, by scenario – relative to the reference cases^a

changes in Australia’s GNP, 2018 relative to the reference case

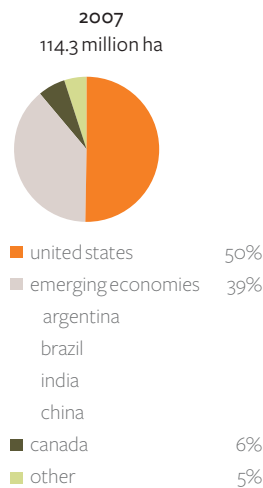
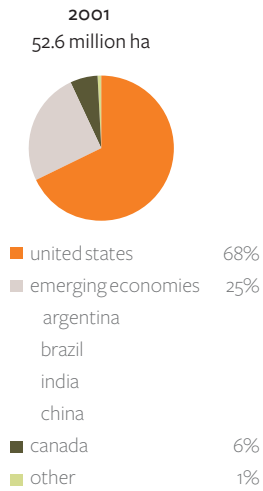


change in exports (free onboard) of agriculture in 2018, by scenario relative to the reference case



^a The unrestricted – aus in scenario assumes that imports of GM crops are not restricted in foreign markets. The EU restricted – aus in scenario assumes that GM crop imports are banned in the European Union.

GM crop uptake of major GM crop producers



global status of GM crops

- GM crops have been rapidly adopted in many major agricultural countries, covering more than 114 million hectares of agricultural land in 2007.
- Continued uptake of GM crops in Argentina, Brazil, India and China has allowed these economies to achieve significant increases in crop productivity, improving their competitiveness on international markets.
- Argentina, Brazil, India and China, in aggregate, account for around 39 per cent of the world's total GM crop plantings and this share is expected to increase as they continue to introduce GM crops at a faster pace than other countries.

GM crops in australia

- More than 90 per cent of cotton produced in Australia is from GM varieties, with the majority exported to markets including Japan, China and Indonesia.
- Canola and cotton are currently the only markets in which Australia competes where GM crops have a significant market share.
- Commercial GM canola cultivation is likely to commence in New South Wales and Victoria in the short term. South Australia, Western Australia and Tasmania maintain moratoria legislation on the growing of GM canola crops.
- Australia will forgo significant economic gains by delaying the introduction of GM crops if emerging economies continue to increase their uptake of GM crops

Report: Nossal, K., Abdalla, A., Curtotti, R., Tran, Q.T., and Brown, A. 2007, *GM crops in emerging economies: impacts on Australian agriculture*, ABARE research report 08.3 prepared for the Australian Government Department of Agriculture, Fisheries and Forestry, Canberra, March.