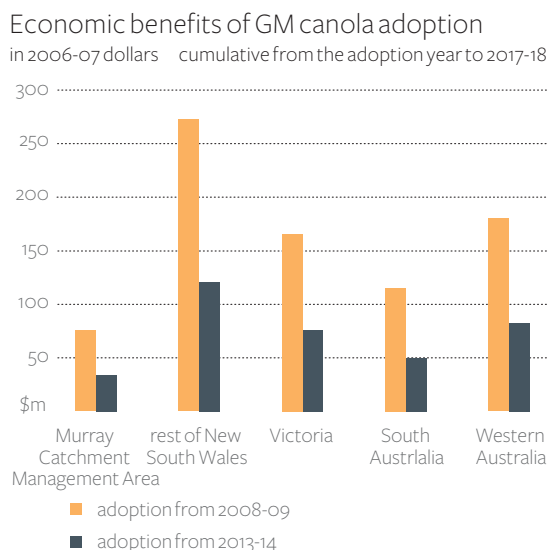
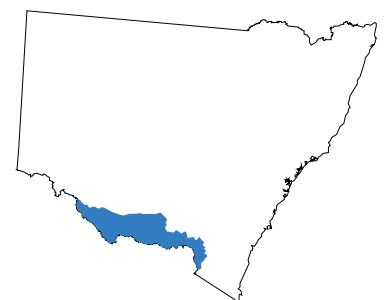


# Economic impacts of GM crops in Australia

from ABARE research report 08.4

- Since the first commercial plantings in 1996, genetically modified (GM) crops have expanded rapidly and now constitute a significant proportion of the world’s broadacre crop output. By 2007, GM crop coverage globally exceeded 114 million hectares.
- A key driver of the rapid adoption of GM crops is the benefits that farmers gain by switching to these crops. Benefits include increased crop yield, reduced farm input costs, including pesticide, herbicide and farm labour, and more efficient farm management.
- GM canola has been approved for commercial release by the Office of the Gene Technology Regulator (OGTR) and for commercial production by the New South Wales and Victorian governments from the 2008 season. Over the longer term, other broadacre GM crops may also be available for adoption by Australian farmers.
- Under a scenario where Australia adopts GM canola, there will be gains to the growing States and regions, leading to higher agricultural economic activity in Australia. The highest increase in absolute terms is projected to occur in the ‘Rest of New South Wales’ region (that is, New South Wales excluding the Murray Catchment Management Area), at \$273 million (in 2006-07 dollars) over 10 years to 2017-18.
- Significant economic benefits of adopting GM canola are also projected for other states/ regions. For example, the cumulative economic benefit for Western Australia to fully adopt GM canola from 2008-09 for the next 10 years would be around \$180 million in 2006-07 dollars. Similarly, the cumulative benefit for South Australia to adopt canola over the same period would be around \$115 million in 2006-07 dollars.
- If the adoption of GM canola is delayed, there would be significant foregone benefits for Australia. For example, a delay of adoption for five years would lead to foregone benefits of a total of \$97 million for Western Australia and \$66 million for South Australia (in 2006-07 dollars).

map 1 New South Wales Murray Catchment Management Area



- Under a hypothetical scenario of Australia adopting canola alongside four other potential GM field crops — wheat, soybean, maize and rice — there would be significantly larger benefits to regional Australia.
- The cumulative benefits of adopting all five prospective GM crops over the 2008-09 to 2017-18 period are projected to range from \$174 million in Queensland, \$551 million in the Murray Catchment Management Area, \$1.1 billion in Victoria, \$1.4 billion in South Australia, \$2.4 billion in Western Australia and \$2.9 billion in the ‘Rest of New South Wales’ (all in 2006-07 dollars).
- Under the assumption of delaying adoption for five years, the cumulative benefits over 2012-13 to 2017-18 would be around \$115 million in Queensland, \$243 million in the Murray Catchment Management Area, \$486 million in Victoria, \$615 million in South Australia, \$1.1 billion in Western Australia and \$1.3 billion in the ‘Rest of New South Wales’ (all in 2006-07 dollars).

### Economic benefits of five GM crop adoption

in 2006-07 dollars cumulative from the adoption year to 2017-18

