

2016 State Report Card

Is the productivity of our primary industries improving?

The success and productivity of our agriculture, fisheries and forestry industries depend upon the health and sustainable management of our natural resources.

This report card uses total factor productivity (TFP, calculated by <u>ABARES</u>) as a measure of the efficiency of our cropping (\$2.9 billion gross value of production in 2011) and livestock (\$2.0 billion GVP) industries in South Australia. TFP measures the values of the total goods that industries produce relative to inputs they use (e.g. labour, land and capital).

Total factor productivity information is not currently available for Alinytjara Wilurara, Adelaide and Mount Lofty Ranges or Kangaroo Island NRM regions, nor for some of our large industries: horticulture (worth \$1.3 billion GVP in 2011), fisheries (\$0.4 billion GVP in 2010) or forestry (\$0.2 billion GVP in 2010). The management of our fish stocks is summarised in a <u>separate</u> report card.





State target :

Maintain the productive capacity of our natural resources

Trend (1994–2010)

Stable

Cropping and livestock productivity was almost stable between 1994 and 2010

TFP is influenced by rainfall and demand for commodities, but investment in agricultural research and development drives long term trends. TFP increases (1978–2010) resulted from advances in technology in plant and animal breeding, improved crop rotations, advances in machinery, the introduction of no till techniques and improved irrigation. These changes have improved the condition of our land and water resources.

From 1978 to 2010, the TFP growth of our cropping and livestock industries averaged 1.7 per cent each year, exceeding the national average of 1.2 per cent (graph on right). Consistent with national trends, the rate of TFP growth in South Australia was almost stable between 1994 and 2010 (graph on right). Since 2000, advances in wheat technologies have been balanced by the effects of climate trends.



Long term (1978–2010) TFP growth rates differ between NRM regions: 2.0 per cent each year in SA Murray-Darling Basin, 1.6 per cent in Eyre Peninsula, 1.3 per cent in both Northern and Yorke and South East and 0.8 per cent in SA Arid Lands.

Good

The value of cropping and livestock production is at or near record highs

To aid the interpretation of TFP, the graph on the right shows the output per hectare of the South Australian wheat industry – our most valuable agricultural industry. Our wheat industry has increased its productivity since the 1970s, reaching record levels in recent years. <u>Climate change</u> is increasing pressure on our land managers to maintain productivity and increase moisture efficiency.

Understanding and working within our natural environment is crucial to maintaining our primary industries. Government and industry invest in research and development so that we can produce more with less and manage the impacts of land use planning, balance the need for land between conservation and production, maintain soil fertility, manage fisheries and the supply of irrigation water. For example, the <u>New Horizons</u> program undertaking research to increase soil productivity.



Reliability of information

Very good for our cropping and livestock industries

Further information: Technical information for this report, Why has productivity slowed since 1994?, How does climate affect productivity?, What drives productivity?



This report is a work in progress. As resource monitoring improves, so too will our ability to describe trends in condition. Licensed under <u>Creative Commons Attribution 4.0 International License</u>. © Crown in right of the State of South Australia.

