





Australia Leads the World in Climate-Smart Farming: Landmark Report Released at COP30

EMBARGO UNTIL 20 Nov, 2025 6:00am AEDST, Brazil: A world-first independent review has confirmed that Australian farmers are achieving large-scale sustainability outcomes under some of the toughest climatic conditions on Earth. The Report was officially released overnight at the Australian Pavilion at the 2025 United Nations Climate Change Conference (COP30) in Belém, Brazil.

The Report 'Climate-smart agriculture: Australian sustainable farming practices enabled by plant science innovation – An independent technical review' clearly and comprehensively demonstrates how Australian farmers are leading the world in sustainable, modern, science-based agricultural production.

Commissioned by CropLife Australia and authored by leading independent agronomic scientist Dr John Rochecouste, the Report draws on peer-reviewed science, national datasets and industry case studies to document Australia's record of producing more food with fewer resources while improving its environmental score.

The Report highlights that Australia's farmers are already world leaders in sustainable, low-emissions agriculture, proof that productivity and environmental performance go hand-in-hand when science and innovation are at the forefront.

Key findings:

- Lowest emissions intensity among major exporters: Emissions for Australian farm produce are up to 42 per cent lower than peer nations. Agricultural emissions have fallen 20 per cent over the past 30 years while output rose by 60 per cent.
- **High adoption of conservation agriculture:** More than 90 per cent of Australia's crops are grown using minimum or no-till systems, improving soil organic matter content, reducing erosion and improving water retention.

About CropLife Australia







- Water efficiency breakthroughs: Water productivity in cotton has improved 40 per cent in a decade (1.03 bales per megalitre vs the 2.07 global average); grain water-use efficiency has increased 60 per cent, delivering a \$5.60 return for every \$1 invested.
- **Sustainable intensification:** Australian agriculture has decoupled growth from land use producing 60 per cent more output on 28 per cent less land than 30 years ago.
- **Best-practice stewardship:** Australia records the most sustainable pesticide use among comparable exporters (1.88 kg per ha), enabled by modern chemistry, precision agriculture and industry-led stewardship frameworks.

While celebrating these achievements, the Report warns that rising heat, water scarcity and pest pressures threaten to erode productivity unless innovation access keeps pace with climate change.

"Australia's farmers have long been among the most resource-efficient growers and producers in the world," said CropLife Australia Chief Executive Officer Matthew Cossey. "Operating in one of the most variable and challenging climates of any major agricultural nation, they have consistently adopted science-based innovations that lift productivity while safeguarding land, water and our unique biodiversity."

"Their success has been underpinned by science, innovation and stewardship: adopting new technologies and practices that drive yield gains, enhance resilience, improve sustainability and protect the environment.

"This Report documents Australia's climate-smart agricultural achievements along with what is needed to continue to reduce the intensity of farming's carbon footprint and meet the food and nutritional needs of Australia and the globe.

"It shows that integrating plant science innovations, including modern crop protection products, advanced genetics, crop biotechnology innovations and precision agriculture techniques, has played a decisive role in enabling Australian agriculture to produce more food, feed and fibre with a smaller environmental footprint.

About CropLife Australia

CropLife Australia is the national peak industry organisation representing the plant science sector in Australia. CropLife's members are the world-leading innovators, developers, manufacturers and formulators of crop protection and crop biotechnology products. The plant science industry, worth more than \$31.6 billion a year to Australian agricultural production, provides products to protect crops against pests, weeds and diseases, as well as developing crop biotechnologies key to the nation's agricultural productivity, profitability and sustainability. CropLife is a part of the plant science industry's 91 country international federation.







"By contrast, in addition to substantially different cropping conditions and crop protection requirements, Brazil's higher pesticide use per hectare highlights the consequences of delayed or hindered access to crop protection innovations. An inefficient regulatory system which fails to utilise a science and risk-based approach has the potential to lock growers to older chemistries and technologies.

"Australia demonstrates what is possible when farmers have timely access to new, more efficient technologies through a modern, independent regulator, achieving greater productivity with less environmental impact.

"Sustaining Australia's leadership will depend on timely access to the next generation of plant science innovations. Limiting those tools risks shifting food production to nations who cannot compete with Australia's advantages in climate smart farming. This will lead to the phenomenon known as carbon leakage, which ultimately increases global emissions," concluded Mr Cossey.

The Report provides an evidence base for policymakers to strengthen science-based regulation, R&D investment and technology access to ensure Australian agriculture remains globally competitive, profitable and sustainable.

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Read the Report

Audio grabs and photos of the event at COP30 Brazil

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